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Teachers' and Students' Perception about the Effects of Using ChatGPT, Grammarly, and Quillbot on Students' Writing Skills

The case of First Year Master students of English at Abdelhafid Boussouf University Center of Mila

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DEDICATION

To our beloved parents for their concerns and support

To our dear sisters and brothers for their encouragement and prayers we

also dedicate this dissertation to our friends and all our family who have

supported us throughout the process

To everyone who has contributed to our education

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Abstract

The integration of Artificial Intelligence (AI) tools in academic settings has transformed how students approach writing tasks. This dissertation examines the teachers' and students'perceptions about the effects of AI-powered applications ChatGPT, Grammarly, and Quillbot . AI applications have demonstrated substantial benefits, including improved writing efficiency, enhanced accuracy, and better organization of ideas. These tools assist students in various stages of writing, such as generating ideas, paraphrasing, summarizing, spelling and grammar checking. The advanced language processing capabilities of AI tools like ChatGPT enable students to refine their writing style, grammar, and coherence, contributing to higher-quality academic work. There is a risk that students may become overly dependent on these tools, leading to a reduction in critical thinking and intrinsic writing skills.

Keywords: Academic writing, AI ethics, AI tools, Critical thinking, Students motivation, writing skills.

List of Abbreviations

AI: Artificial Intelligence

PHD: Doctor of Philosophy

EFL: English as a Foreign Language

ESL: English as a Second Language

ANN: Artificial Neural Networks

ML: Machine Learning

ICT: Information and Communication Technologies

NLP: Natural Language Processing

MT: Machine Translation

ENIAC: Electronic Numerical Integrator and Calculator

MANIAC: Mathematical Analyzer, Numerical Integrator, and Automatic Computer

GT: Google Translate

LISP: list programming

AWCF: Automated Writing Corrective Feedback

AWE: Automated Writing Evaluation

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General Introduction

Nowadays the utilization of AI powered tools in the domain of writing has become undoubtedly a revolution. It is evident that numerous academic research conducted with the assistance of this brand new technology. These tools used in a variety of areas not only in the field of academic writing and that all comes down to their usefulness and convenience.

The implementation of this kind of new technology in the domain of writing may help to alter and reshape the way students deal with assignments and tasks given to them with no difficulty. Nevertheless, these tools should be put in good use. The main role of these gadgets ought to be centered on problem solving like correcting grammar including prepositions, punctuations, sentence structure and writing accuracy and clarity. Because of the writer's capacity side by side with his/her perception of these tools, writing a composition evolved quickly. For that reason, the lacks and flaws become noticeable, due to the world- wide use of these instruments, new ones emerged on daily basis and they have their own unique functions and performance.

Some AI powered tools like Chatgbt, Quillbot and also Grammarly have contributed remarkably to the development of academic writing by evaluating written texts and offer feedback on several aspects of the writing, including syntax, vocabulary, grammar, content,

And organization .These websites generate and provide feedback by comparing the produced text to a large library of properly and incorrectly written examples. Put differently, EFL students have access to immediate, personalized feedback on their writing, which can help those spot errors and fix them more quickly. Additionally, by providing students with guidance on how to improve their writing skills, this real-time feedback can help them understand the core ideas of successful writing.

Statement of the problem

The use of AI tools in writing assignments presents a potential solution to these challenges. AI-driven platforms can offer immediate, personalized feedback; guiding students through each stage of the writing process and helping them develop better writing habits. These tools can address a wide range of writing aspects, including grammar checking, punctuation, coherence, summarizing and paraphrasing. For instance, AI can help students improve their writing by analyzing text for grammatical accuracy, suggesting structural improvements, and providing vocabulary enhancements to enrich their writing. Additionally, AI tools can assist with paraphrasing, summarizing, and ensuring the overall coherence and flow of the text.

Moreover, AI tools can enhance student engagement by offering interactive and adaptive learning experiences tailored to individual needs. They can track a student's progress over time, providing insights into areas that need improvement and adapting to the student's learning pace. This personalized approach can make writing assignments more engaging and less daunting for students, encouraging them to invest more effort and time into their writing tasks. The implementation of AI tools can alleviate the workload of educators. Teachers often face the challenging task of providing detailed and timely feedback to a large number of students. AI tools can assist by performing initial assessments, highlighting common errors, and suggesting improvements, allowing teachers to focus on complex aspects of writing instruction and providing more nuanced feedback.

Aims of the Study:

The aim behind conducting this study is to find out how master one students of English at the university center of Mila employ AI tools like Chatgpt, Grammarly and Quilbot while writing the assignments. Evaluate the effectiveness of AI-based tools in enhancing the writing

Skills of students. This includes assessing the impact of AI on various aspects of writing such as grammar, punctuation, coherence, and summarizing, paraphrasing, and overall quality. The study seeks to understand the ways in which AI can provide personalized feedback, the extent to which it can engage students in the writing process and its overall contribution to improving writing proficiency. Additionally, the study aims to explore how AI tools can reduce the workload of educators while maintaining or improving the quality of feedback provided to students.

Research Questions

Do chatgpt, quillbot and grammarly help students developing the paraphrasing and summarizing skills ?

Do Chatgpt, Grammarly and Quilbot help students improving their writing skills like punctuation, grammar checking and writing style suggestion?

Do teachers agree to integrate AI tools in teaching and learning writing?

Research Hypothesis

AI powered tools like Chatgpt, Grammarly and Quilbot would help students improving the use of punctuation and grammar rules in addition to writing styles.

AI powered tools like Chatgpt, Grammarly and Quilbot would help students doing the paraphrasing and summarizing assignments.

Teachers would support the integration of AI tools in teaching and learning writing.

Research tools

In order to answer the questions outlined above, the data collected through a questionnaire distributed to first-year master English students at the Department of Foreign Languages at Mila University Centre, with a sample size of approximately 56 students. In

Addition, the teachers'; questionnaire was surveyed to ten teachers in the same department. Moreover, just five teachers have answered the questionnaire. The questionnaires seek to gather different perceptions on the impact of using Chatgpt, Quillbot and Grammarly on students writing skills.

Structure of the study

The present study consists of two chapters. First chapter, entitled theoretical part. It contains two main sections. The first section is devoted to writing and academic writing. It includes a definition of writing, the writing process, the different types of writing, and the importance of writing. It also explores the academic writing, its characteristics, forms, skills and approaches to teaching academic writing. The second section provides deep insights into the use of artificial intelligence in academic writing. It includes an introduction to machine learning, emergence of AI tools, types of Chatbots, the importance of using AI in academic writing, pros and cons of AI tools, the benefits of adapting AI in writing, comparison between manual and computer-assisted writing, the implication of integrating AI in research and the integration of AI in teaching writing. The second chapter, titled "The Practical Chapter "relates to the practical part of the research work. It is divided into two sections. The first section is concerned with the research methodology, data analysis, and research results of the students' questionnaire. In the same manner, the second section deals with research methodology, data analysis, and the research results of the teachers' questionnaire.

Chapter One: The Theoretical Part

1 - Introduction

Writing is one of the fundamental skills of acquiring a foreign language like speaking, listening, and reading. English learners should work hard to develop their writing skills. Writing is considered as key to academic success for the learners because they are required to write a dissertation by the end of their study. No doubt, that teachers also play a significant role in motivating and teaching writing skills to English learners by providing instructions and writing activities. For example, teaching grammar rules and writing exercises can be a solution for English learners. Many English students in our universities have faced many difficulties in enhancing their writing abilities even though they spent years and years studying written expression module. Therefore, the problem is walking around the teachers' miss- employment of the appropriate strategies for teaching writing and the students lack of motivation to learn how to be better writers.

Section One: The Writing Skills

2 - Definition of writing

Based on the wealth of literature on this subject, different views on the definition of writing have been reported by many researchers and linguists. It is the ability to transform ideas, information, knowledge, and feeling into a written form using the alphabet and graphic symbols .For instance, Rivers (1968) views that In writing simplest form, it is the act of putting down into regular graphic form something that has been said. Byrne (1988) shares this view in writing; we employ graphic symbols, which are letters, or letter combinations that have relation with the sounds we produced when we talk. Widdowson (1978) also defines writing as the process of moving the arms and fingers to create marks, which are seen by the eye. According to the language's graphological system, these markings are letters that

Are grouped together to form words. In other words, writing is the employment of the visual medium to make the grammatical and graphological structure of the language. Nunan (1989) suggested that writing is a very complicated task in which the writer has to show control over a several variables at once. The content, format, sentence structure, vocabulary, punctuation, spelling and letter formation are the factors the writer should master when writing sentences.

According to the definitions above, we can demonstrate that the writing skill is not merely restricted to the use of graphics and symbols; but it is related to the success of all these aspects: daily life, working careers, academic pursuits and communication.

3 - The Importance of Writing

Writing is a very important skill. It is included in most of our daily activities and different aspects of life.

3 - 1 - Writing as an Aid to Communication

According to Tabitha Wangare Wambui ET all (2012) writing is considered as one of the most effective means of communication. In order to communicate with your family, friends and employer...etc. one has to write a message that can be sent in a form of letter, report, memo, e-mail, postcard and fax. The writer should be careful about the writing style, the choice of words, the length of the sentence, the clarity of the language used while writing. Writing is also useful for maintaining the communication documents and traceability.

3 - 2 - Writing as an Aid to Thinking

Robert Barrass (2005) explained how writing helps the person organize himself, keep his thoughts and guide him to a better way of thinking. For example, if a person is asked to write an essay about a certain topic. He is should keep piece of paper in his pocket, and write down any interesting ideas that come to his imagination about the topic. These ideas will be

Organized and employed in the written composition. In addition, while attending a lecture or a conference, the attendant should bring with him a sheet of paper and take notes to keep the information presented by the lecturer. At the end of the lecture, the information copied down enlightening his thinking and leads him expand his knowledge. The relation between writing and thinking is illustrated in the following quotation" The toil of writing and reconsideration may help to clear and fix many things that remain a little uncertain in my thoughts because they have never been fully stated, and I want to discover any lurking inconsistencies and unsuspected gaps. And I have a story». The Passionate Friends, H. G. Wells (1913). Writing may enhance cognitive processes, foster critical analysis, and contribute to the development of well-structured and coherent ideas, making it an indispensable tool for students in their academic career.

3 - 3 - Writing as an Aid to Academic Success

Robert Barras (2005) also clarified that writing is very essential in studying all subject matters. The learner who had the desire to further his studies in a specific field, he has to lie emphasis on some writing skills like: clarity, arguments and precision. Working on improving these skills leads to an academic success. The student spend several hours a day in the classroom doing writing assignments, taking notes, writing reports and passing tests and examinations. In the academic journey, the grades of the students will be assessed based on his writing style and language use not about the information and knowledge he gets. The students who cannot transfer his ideas clearly and precisely into a written form is expected to get low grades .However, the one who can express his knowledge clearly, precisely, provide arguments and use beautiful language, is expected to get good grades. Writing is a powerful tool for academic success not only cultivates effective communication skills ,but also paved the way for personal and intellectual growth, empowering students to navigate the complexities of higher education with confidence and proficiency.

3 - 4 - Writing as an Aid to Professional and Life Success

S.Lee and D.Schmidgall (2020) suggested that writing is one of the highly demanded skills in business sectors. Most of job posts advertised by employers require the so-called soft-skills like writing. The common expressions written in the job post description are: "strong command in writing skills" or "excellent written communication skills", as the employers make deals not only with local businesses but also with the international dealers. Therefore, the job seekers who master writing skills and has strong command of them are more likely to be recruited by the employers. For instance, writing an ambiguous e-mail or official correspondence for making a business deal. It may cause losing it or miss-arrange a business appointment with a very important international business contributor. Writing is indispensable for professional and life success. It underscores the transformative potential, equipping individuals with the communication finesse and reflective capabilities that are essential for navigating diverse challenges and achieving sustained personal and career fulfilment.

4 - The Writing Process

Writing is considered as an inevitable component in the academic arena, and a highly required skill in various academic and professional disciplines, hence, some multilingual writers encounter frequently many difficulties in an attempt to comprehend and getting the gist of this extremely important skill. A collection of already conducted studies illustrates that not only those who are new to the concept of academic research, but also intellectual and well-experienced writers struggle and sometimes fall short, with regard to, adjusting writing processes, characteristics, styles, community requirements, and the like. In order to a clear understand.

As it appears evidently in the previous definition that the writing process plays a significant role in every aspect of the academic life, nevertheless it ought to be oriented through a series of phases, in order to assure the success of a given dissertation should undergo the following elements: Pre-writing, Drafting, Revising, and ultimately Editing.

4 - 1 - Pre-writing

Pre-writing is the very initial step in the writing process. It differs in terms of its tasks and activities. In this regard, it must follow a set of guidelines, for that reason. Primarily choosing a particular topic, thus, researchers or writers need to carry out a profound quest in order to find out a topic that is compatible with their needs. In the second place, comes into play gathering information that is about gleaning data from different sources to be added in their written work. And ultimately connecting ideas together and drawing an outline. The former mainly deals with linking the collected information in an organized manner. While the latter demonstrates the organization of all elements in a hierarchical classification.

4 - 1 - 1 - Choosing the Topic

The topic selection is undoubtedly seen as the building block when it comes into writing. The most essential part in any academic work, due to its necessity in the development of any piece of writing. Before making any step, forwards a set of measures ought to be taken into account. Firstly, knowledge about the topic should be gained in a strict manner. Then leafing through books and journals in libraries to get some insightful notes. Also people's ideas and perspectives may be helpful, as well as seeking the assistance of your supervisor and your comrades, that may pave the way for connecting all the gathered information to be connected and put into effect(Wang & Park, 2016, p.18).

4 - 1 - 2 - Gathering Information

To put it simply, Information gathering is all about extracting data as well as ideas and conceptions from variant sources as a means to be integrated in someone's research. For that, reason students are highly required to be geared up in order to grasp, identify and utilize information sources needed in their research project. They are also supposed to have meaningful discussions and interviews with peoples especially scholars and linguist to get the information they need, in the same vein, it's highly important for researchers to get access into numerous platforms, as well as, scholarly journals, so that, they will be able to attain unlimited data for their academic work (Rubin & Alan, 2006).

4 - 1 - 3 - Organizing the Ideas and Making an Outline

The organization of ideas is a key element in the process of writing which is about putting together all the accumulated data derived and cited from different resources. One essential component that should not be neglected is coherence, in this sense; Konch suggests that "vague descriptions of coherence might lie in the rather vague nature of coherence". This concept is mainly about the consistency and interconnectedness of all segments in a given research, also the notion of structure should be brought up in this respect. All collected ideas ought to be structured according to the plan. This process considers the essay length, cohesive device, paragraphing, and so forth to assert the organization and adjustment of the whole work (Ruegg & Sugiyama, 2013, p.2).

One element that relates to the previous one is making an outline; basically it's also about organizing and arranging the content. Students encounter very often tricky issues and problems while writing a dissertation or an essay, some of which are how to start writing, how to proceed with the next clause, how to connect sentences together and so on. Therefore to pre-empt such shortcomings there is one of the most commonly used techniques which is outlining. It is about arranging ideas in a neatly and well-structured way. Stanley (1988) defines outlining as the Scheme of meaning that appears from the body of the writers

Taken, thus, outline is considered as a plan that precedes writing. All details and supporting ideas must be interlinked and kept in an order way, so with the assistance of this technique students can write easily and perfectly (Tazky, 2018, p.345).

4 - 2 - Drafting

In writing drafting referred to as the use of drafts, which means that writers must write on papers that are not going to be submitted, as a part of planning and to prevent any unexpected problems. The exploitation of this technique differs whether the writer is an expert or a novice one. Typically, the former tends to put emphasis on what to add next concerning the word or sentence level, on the other hand, the latter is concerned with the context in a bid to assure the evolution of the whole piece of writing. In fact, drafting is preliminary procedure that takes place while composing a written work; it is a stepping-stone that writers rely on when they conduct their researches. It involves the conceptualization of the topic, the structure of the text, and putting together all the units that constitute the text. Consequently, drafting plays a pivotal role in the pre-writing process (Huff, 1983, p.800).

4 - 3 - Revising

Revision takes part greatly in the writing process on so many levels, due to its significance and unavoidable role in the ongoing procedures. This step is mainly about reading and analyzing a given academic work several times before publication or handing it out with the aim of making changes and altering any inadequate sentence or phrase, even though these changes may affect the meaning, so the writer needs to be meticulous and precise. It takes place generally after finishing drafting, nevertheless, writers try to defects in their work while comparing between their actual perception and how may the reader expect this piece of writing, therefore this written text must suit the reader's needs(Fitzgerald, 1989, p.44).

4 - 4 - Editing

Editing is the last phase in the writing process and evidently similar to the already mentioned phases in terms of rules and functions. however editors undertake a deep analysis to spot errors and tackle these problems, even trivial errors should be gotten rid of while editing a written work, there are a set of guidelines that should be followed rather than finding grammatical errors like paragraph length, line spacing, margin size, and references. In this regard, a substantial amount of attention paid to small details. William Zinsser (1985) says that clear writing "is worth bothering about. The game is won or lost on hundreds of small details" (p. 13) (Sherman, 1993, p.234).

5 - The Types of Writing

Robin Jeffrey in his book titled: About Writing: A Guide categorized writing into four main types, which are expository, descriptive, argumentative/persuasive and narrative. Each of these writing styles employed for a particular goal. A single written composition may contain more than one writing style. (2016:03)

5 - 1 - Expository

This writing style is commonly used to clarify,define,explaine, analyse concepts and information to the writer's audience. Personnel opinions and point of views are not included in such type of writing. However, it concentrates on the general facts and real statistics in a certain topic. The writer may use the expository type in textbooks, articles, recipes, news, business and scientific writings. (Robin Jeffrey, 2016:03)

5 - 2 - Descriptive

Descriptive writing is often used to describe a person, a place, an object or an event using the appropriate words, which make the reader, feel and illustrate what the writer saw, feel and experience in real life situation. The figure of speech like metaphor is employed in

this type of writing for a better description to the writers feelings, concepts and impressions through his physical appearance. Trying to convince or explain something to the audience is not recommended in descriptive type, while we may find it in: poetry, journal, diary, fictional novels, plays. The writer should respect the arrangement of the events from general to specific, from top to the bottom to preserve the sequence of the events, making cohesion and providing a framework for individual details (Robin Jeffrey,2016:04).

5 - 3 - Persuasive/ Argumentative:

Persuasive writing is the dominant style in writing academic papers. If the writer has the intention to convince the reader about his beliefs, thoughts and opinions, he will support his writing by arguments, reasons, justification and explanations. The persuasive type is used in writing: cover letters, editorial newspaper, review items, letters of complaint, advertisement, and letters of recommendation and school assignments (Robin Jeffrey, 2016:04).

5 – 4 -Narrative:

The definition of narrative writing is to tell the reader about a fictional and non-fictional story that has been experienced before, either by the writer himself or by someone else. The sequence of events happened could be constructed chronologically .The following elements: characters, conflict and setting. This type of writing is used in novels, short stories and autobiography (Robin Jeffrey, 2016:05).

6 - Academic Writing

Academic writing is very different from other types of writing used in fiction, poetry, newspapers and communication. It is a formal style written in a more objective way, focusing on facts. Its purpose is to search for the truth and tell us about something we do not know.

A researcher should originally produce academic writing and it is about digging deeper to look for facts, which still unknown by the world, or it is the reviews of the work of other researchers. Irvin (2010) defines academic writing as all the types of writing tasks devoted to fulfil academic purposes like: academic articles, essays, dissertations, academic reviews and literature Reviews.

7 - Characteristics of academic writing

Academic writing has its own characteristics that differentiate it from other types of writing. These characteristics are explained bellow:

7 - 1 - Purpose

Generally, academic writing aims to facilitate the scholar discourse inform readers and ultimately contribute to the advancement of knowledge within academia. S. Bailey stated four main purposes for academic writing, which are:

- To report on a piece of research the writer has conducted.

- To answer a question the writer has been given or chosen.

- To discuss a subject of common interest and give the writer's points of views.

- To synthesize research done by others on a topic.

7 - 2 - The Audience

The audience is the person who is going to read what the writer writes. Each writer has to determine his own audience because writing a newspaper article is not the same as writing a journal article. The former is oriented to the public community but the latter is written for students and researchers (Roy Johnson. 2012:17)

7 - 3 - The Tone

The tone is very essential in writing. It is combined with a lot of linguistic usage. The writer's attitude and moral views are clearly reflected on aspects of writing like the choice of subject, literary devices, and use of language in general. The control of the tone gives the writer more control when communicating with the intended readers, making the writing more persuasive and avoid Unpredictable tone alterations that confuse readers. Choosing the right tone while writing needs two important skills. The first is an assessment of what tone is appropriate for the nature of the message and for specific readers. The other is to feel the impact of words and their connections and to be able to exploit these qualities in the text you create. In addition, clarity, honesty and simplicity are very effective for most readers (Roy Johnson. 2012:96). The tone in academic writing should always be neutral and reliable, free of sentimental or biased terminology. This promotes an environment of intellectual discourse for differing points of views, ensuring that the ideas are conveyed effectively and convincingly. Scholars preserve the integrity of their work and further the body of knowledge in their fields by following this norm.

7 - 4 - Organization

John M, Swales and Christine b, Feak (1994:10) in their book: Academic Writing for Graduate Students, have clearly explained what is organization in academic writing. They say that it is "The information presented to readers in a structured format". Even short pieces of writing have regular and predictable patterns of organization. You can take advantage of these patterns, so that readers can still follow even if you make errors (John M, Swales and Christine b, Feak.10).

7 - 5 - Cohesion

Cohesion is the relationship of meaning of one item with another in the text, just like other semantic relations : synonymy, antonyms, and polysemy. According to Halliday and Hasan

(1976), "Cohesion refers to the relations of meaning that exist within the text, and it is expressed through the stratal organization of the text" "It occurs where the interpretation of some elements in the text is dependent on that of another" Taboada (2004) defines cohesion as the internal hanging together of the text. To Yule (2008) Cohesion is the tie and connection that exist within the text. It is an aspect of the language system and a kind of intra-sentence relationship between an item prior and afterwards other items in the text. Cohesion in the communication process provides information on how the writer organizes the ideas they wish to get across. Halliday and Hasan (1976) believe that a text's language and grammar play a role in expressing its cohesiveness. Thus, the two types of cohesiveness that might occur are lexical and grammatical cohesion. Grammatical cohesion is the cohesive quality that conjunctions, ellipses, substitutes, and references among other grammatical structures transmit in a language. Conversely, lexical coherence is defined as "the cohesive effect achieved by the selection of vocabulary." (Halliday & Hasan, 1976, p 274). Lexical cohesion can be realized in reiteration (using the same, or semantically related vocabulary such as repetition, synonym, super ordinate, general word) and in collocation (co-occurrence of lexical items).

7 - 6 - Coherence

A text is composed of sentences that occur in a context as well as in an organized string of words. Coherence refers to how the statements in a text appear in their context. More precisely, the comprehension of the meaning or message is aided by the contextual fit of the text. According to Taboada (2004), "Coherence is the hanging together of the text with relation to its context of situation or culture" (p. 158). Yule (2008) states that "Coherence is everything fitting together well, and it is not something that exists in words or structures, but something that exists in people" (p 126). According to how the audience and the text relate to each other, coherence arises from how the meaning of the text is interpreted.

(Tanskanen, 2006).As a result, a text's coherence can only be understood if the recipient has enough prior knowledge to understand how the discourse's messages are connected.

8- Forms of Academic Writing

There are several types of writing, and each has a specific function. Concise paragraphs concentrate on a single topic. Essays elaborate on this by putting up arguments or doing topic studies, which are typical in academic settings. Comprehensive research projects leading to postgraduate degrees, dissertations add fresh information to an area. Reports are frequently used in professional settings to deliver results and suggestions since they are a straightforward and succinct way to convey information. Every format, ranging from paragraphs to dissertations, has specific uses in written communication.

8 - 1 - Paragraphs

Seemingly writing some random words on a piece of paper is an easy task compared to writing a sentence. On the other hand, paragraph writing is the most difficult activity in the process. Bear in mind that it is the most required skill for a writer in order to be qualified enough to conduct written assignments. By definition paragraph is a group of united and coherent sentences that revolve around a particular topic, therefore, it is clearly noticeable that a paragraph should discuss one topic and not deviate from it. Some of the fundamental characteristics of a paragraph are length, cohesion, unity of elements, and concision(Wali & Madani, 2020, p.44).

8 - 2 - Essays

Essays are defined as a short piece of writing because in most cases it consists of approximately 3000 words. It discusses within its paragraphs a specific subject so the reader while going through the lines he/she gets the idea this essay will respond to. Therefore, in an

Essay the writer always seeks to answer a specific question or solve a given problem or gives solutions and instructions. Given the fact that, in order to write an effective essay it is highly important to illustrate the knowledge that you already possess and all the collected ideas and facts should be included in a logical way. Including a well-organized argument that is also reinforced through literature is regarded as the stepping-stone of construct a successful essay (West et al., 2019, p.01).

8 - 3 - Dissertations

In the field of writing, the term dissertation is distinctly used. For instance, the lengthy document created and submitted as the conclusion of a PHD study is identified as a dissertation in North America, but in the United Kingdom, a dissertation is referred to as a thesis. For university students dissertation is the most difficult and breath-taking job for them in order to get a degree as a result of that, because a significant amount of time and effort should be dedicated to this exhausting task. Therefore, the full commitment is required. It starts with planning and drafting and going through the exhaustive amount of resources until this work is submitted finally. Master's dissertation differs in its length in comparison to the doctoral ones. The first one mostly consists of 10000 up until 20000 words while the other one is around 80000 to 100000 words and it depends on the field of study (Thompson, 2012, p.284).

8 - 4 - Reports

In the most basic sense, a report is seen as a form of assessment in writing. So an excellent report mainly focuses on investigation, experiment, as well as inquiry. There are multiple ways to write a report that comply with the assignment requirement, however, the most common way is that a report should be made of a title page, which includes the title of the report, the name of the researcher, and the purpose behind writing this report. Then comes the table of contents where all the elements are structured in an ordered manner. Afterwards the

Introduction which highlights the entire details concerning this report. A report is also accompanied by a literature review, methodologies, findings, and so forth(THE UNIVERSITY OF NEWCASTLE, 2016).

9 - Skills of Academic Writing

This section sheds light on some of the pivotal skills with regard to academic writing, some of which are paraphrasing, summarizing and quoting. Those techniques are closely related in terms of their usage. Because the three of them focus particularly on the aspect of deriving a written passage from a specific source and altering its structure and form by omitting some details and adding some.

Those skills are regarded as the backbone of academic writing due to their absolute necessity. For that reason, any writer who attempts to write a composition must make use of these important skills as an aid. Because when a writer grasps the information from a different source, in this regard he is required to rewrite it in his own words, therefore these techniques provide some useful solutions like condensing the size of the written passage, changing the structure and vocabulary words by replacing them with new ones. That is why those skills ought to be mastered.

9 - 1 - Paraphrasing

Paraphrasing is defined as the task of reformulating or reshaping the meaning of a text in a different form. This skill is difficult for the vast majority of students because it requires cognitive ability and high quality of thinking because a writer who paraphrases must find suitable words without damaging the context of the source text. It is about substituting words and sentences but the meaning must be kept as it is. Therefore, it remains a challenging task for writers and students as well who have a serious issue of limited vocabulary.

9 - 2 - Summarizing

Given that summaries differ greatly from other types of writing, students should receive specialized education in this area. For the most part, writing involves coming up with concepts and specifics as well as carefully organizing the content and structure. On the other hand, summarizing relies on previously written content. In order to guarantee that the summary accurately conveys the meaning of the original, the writer of the summary must choose what to include, what to leave out, how to rephrase or rearrange the content, and more. It is well worth the effort to teach students how to summarize. Summarizing can aid in a student's comprehension of the literature and even help those spot unclear passages. Furthermore, pupils may be able to retain the primary ideas they are summarizing if they make an effort to identify them. (1987, Muller and Surber).

To summarize, one must be able to think in at least two different ways. The first is the selection process, when decisions have to be made over which textual material should be accepted or rejected. The second is an educational process in which concepts need to be reduced in scope by replacing higher level, more detailed concepts with more broad ones (Johnson 1983).

These thought processes are influenced by several variables. First and foremost, the text's qualities are significant. Selecting key concepts from some text types like narratives is simpler than from others like expositions. Additionally, additional selection and condensing are needed for longer texts. Moreover, the more judgments required to determine which ideas are significant, the more complicated the text. Second, the required thinking may change depending on whether the text is included or not when summarizing. Give pupils the freedom to peruse the material as they summarize, and they will have more "mental space" for the condensation and selection processes. If the text is missing, it can be omitted intentionally rather than being decreased for the incorrect reason—simply forgetting.

9 - 3 - Quoting

A direct quote is an exact replica of another person's written or spoken words. Quotation marks ("") are used to indicate this surrounding those words. There are various advantages to using quotations rather than paraphrasing and summarizing when presenting your case (Schechter, 2022):

✓ Including quotations into your work gives your point direct proof from reputable sources.

✓ Using the words of reliable sources demonstrates your investigation into the subject matter and your consultation of pertinent, authoritative sources, which enhances your credibility.

✓ Choosing powerful quotes demonstrates your ability to distill the key points from the material and employ them persuasively in your own thesis.

Nevertheless, take care not to paraphrase too much. As demonstrated by the case above, over-quoting puts you at risk of depending too much on other people's words and stifling your own critical voice.

Use citations sparingly: Using too many quotations can disrupt the flow of thought and give the impression that you lack original thought.

10 - Approaches to Academic Writing

After 1960s, several strategies for improving writing proficiency both inside and outside the classroom have been developed. Using a certain strategy relies on what students are expected to accomplish. For instance, Teachers may wish to encourage students to write

creatively on their own or in groups. They may also want them to study various genres and place more emphasis on the process of creating the final product than the output itself (Harmer, 2004). There will only be three approaches covered: the process approach, the genre approach, and the product approach, which will be thoroughly explained below.

10 - 1 - The Product Approach

The product approach is one of the methods employed for teaching students in writing. As its name suggests, it concentrates on the finished product or generated component. This method places strong emphasis on studying model texts so that students can mimic the model language and become conscious of grammatical features. According to Richards, this method consists of four stages (2003: 3-4):

➢ Familiarization: Learners are taught certain grammar and vocabulary usually through a text.

➢ Controlled writing: Learners manipulate fixed patterns, often from substitution tables.

➢ Guided writing: Learners imitate model texts.

➢ Free writing: Learners use the patterns they have developed to write a new composition.

From a different point of view, According to White (1988:5), the model-based method is as follows:

Initially, the example material must be examined from several angles, including sentence structure, grammar, and substance. The second phase involves substituting words based on the

Specified subject. As the final stage, Write a text that appears to be an imitation with distinct elements. It is generally accepted that teaching writing begins with the model text. However, as white suggested, there should be a study grammatical structure, substance, sentence structure , organization and rhetorical patterns. So, everything is examined closely. Learners are given a new topic and instructed to create a parallel text after becoming comfortable with these components. (white,1988).

Study the model $\Longrightarrow$ manipulate elements $\Longrightarrow$ produce a parallel test

Figure 1: The Product Approach Stages (White, 1988)

The product-based approach focused on language forms, grammar, syntax, and mechanics of writing. It concentrates on the learners' ultimate output and ensures error-free performance at the sentence level. Researchers like (Briere, 1966,) argue that the primary focus of this strategy is on writing quality rather than quantity and fluency.

10 - 2 - The Process Approach

Kroll claims that the inefficiencies and shortcomings of governed composition and the product approach are what drove the emergence of the process approach. He continues by saying that traditional methods do not foster innovative thinking or imaginative writing. These factors led to the widespread adoption of the process of writing method by English as a Second Language (ESL) instructors and researchers.

According to the process approach, writing is an expression of creativity that needs time and encouraging criticism in order to be done successfully (Kroll, 1990). Teachers must effectively move from their responsibilities as the source of knowledge to the duties of learning facilitators during the writing process. Instructors should also push students to think

Deeper about the topic as well as the process of writing. In other words, learners pass through a number of stages in order to write a full comprehensible production .

In the same point, Murray (1992: 16) defines this approach in the following terms:

> The process-oriented approach refers to a teaching approach that focuses on the process a writer engages in when constructing meaning. This teaching approach concludes with editing as a final stage in text creation, rather than an initial one as a product-oriented approach. The process-oriented approach may include identified stages of the writing process such as prewriting, writing and re-writing. Once the rough draft has been created, it is polished into subsequent drafts with the assistance.

Students who use the process approach become more purposeful, innovative, creative, and engaged in writing about a variety of subjects. They also write more personally. Additionally, that method lies emphasis on the substance rather than the form (Steele, 2004). Furthermore, it places greater emphasis on the steps that make up the process. Actually, there is disagreement on the precise number of steps that make up the writing process. However, prewriting, drafting, revising, editing, and publishing are the five processes that are most well-known.

10 - 3 - The Genre Approach

The genre- based approach can be regarded as an extension of the product approach, while it emphasizes that writing depends on the social context in which it is generated, it views writing as primarily linguistic task. This is in fact a contrast to the product approach. This method has been labeled the "English for Academic Purposes Approach" because it is particularly suitable for pupils studying the language objectives. Another explicit

Description of the genre approach is proposed by Swales (1990:58) who defines it as: "A genre comprises a class of communicative events, the members of which share some set of communicative purposes. These purposes are recognized by the expert members of the parent discourse community, and thereby constitute the rationale for genre. This rationale shapes the schematic structure of the discourse and influence constrains choice of content and style". From another perspective, students must learn discourse knowledge about many types of writing and objectives in addition to understanding the subject if they are willing to be successful writers.

Section Two: The Use of Ai Tools in Academic Writing

1 - Introduction to Machine Learning

Artificial intelligence includes machine learning, which gives computers the ability to learn and make judgments without explicit programming. Machine learning algorithms are strong tools for applications like picture identification, language processing, and predictive analytics because they continuously enhance their performance by examining patterns in data. By offering insights and automating intricate procedures, this technology is revolutionizing a number of industries, including healthcare and banking.

1 - 1 - Overview of Machine Learning

The concept of machine learning has been a fascinating phenomenon since its very first inception. According to Michie et al (D. Michie, 1994), this domain encompasses some automatic computing operations that relate to logical or binary operation that have the ability to obtain a task from a large number of examples. It is mainly concerned with gaining knowledge and new skills through computer by providing a suitable setting accompanied by an overwhelming amount of materials. Machine learning seeks to produce classification expressions that are easily intelligible to humans. Background information may be used in development, but operation is presumed to occur without human intervention. They must Sufficiently imitate human reasoning to offer insight into the decision-making process, such as

Statistical techniques (Ayodele, 2010, p.09).

Some of the aims of machine learning:

- To learn something, comprehend it, or become proficient in thought, experience, or study; to become knowledgeable about something; or to develop a talent (in an art or discipline).

- To create computer simulations and develop computational models of the human learning process. This area of study is also known as cognitive modeling.

- To create broad learning algorithms that are not dependent on specific applications and investigate recently developed approaches to learning.

Another definition of machine learning is the practice of creating computer systems that use a learning process and automatically develop as time goes by. Machine learning is still defined as automatically deriving the theory from the data via model fitting, inference, or example-based learning.

1 - 2 - The Early Foundation of Machine Learning

Historically speaking, The early foundation of machine learning is attributed in terms of its modern aspect to a psychologist from Cornell University named Frank Rosenblatt. He presided a group of scientists to build a machine that can recognize the alphabetical latters inspired by the idea on how human nervous system functions Rosenblatt (1957, 1959, 1960). Its founder called this brand new invention the "perceptron". It used analog, as well as, discrete signals and also included a threshold element that transformed analog signals to discrete signals. It turned out to be the first prototype of the so-called artificial neural networks (ANN), and its learning model was similar to the psychologically developed models of animal and human learning (see Bush & Mosteller, 1951). Rosenblatt (1959) conducted the initial mathematical analysis of the perceptron. The Novikoff theorem, published in 1962, has gained more recognition, though, as it provides the requirements for a perceptron learning algorithm to converge in a finite number of steps (Fradkov, 2020, P.1385).

1 - 3 - The Difference between Human Learning and Machine Learning

1 - 3 - 1 - Human Learning

Human learning is a basic process that allows us to grasp comprehension, abilities, and information. It involves our natural potential for sophisticated reasoning, flexibility, and curiosity. We as humans differ from robots in that we can interact, learn from our experiences, and exercise critical thought.

1–3–2 Machine Learning

A subset of artificial intelligence (AI), machine learning, or ML for short is the study of creating computer systems that learn automatically from data and experience. To put it another way, machine learning allows computers to learn from data and anticipate or make judgments without needing to be specifically programmed to do so.

Fundamentally, machine learning is all about developing and applying algorithms that help with these choices and forecasts. As they handle more data, these algorithms are built to perform better over time, becoming more precise and efficient.

1–3–3 The Difference Between Human and Machine Learning

Human creativity is innate in learning, utilizing our feelings, imagination, and intuition. We have the ability to think abstractly, link seemingly unconnected ideas, and come up with original notions. This special feature of human learning gives rise to our ability to express ourselves artistically, to be creative, and to solve problems. On the other hand when it comes to quickly processing massive amounts of data, machines are unmatched. They can quickly generate insights and make decisions by analyzing complex datasets in the blink of an eye. And Humans can concentrate on more intricate and strategic jobs by using machine learning (ML) algorithms to automate monotonous tasks. This makes it possible for numerous industries to have higher productivity, cost reductions, and simplifies procedures in diverse sectors.

2 - Emergence of AI Tools:

In our modern world, an extraordinary development in new technologies has been witnessed. Among these innovations, artificial intelligence stands out as one of the most significant advancements. It has an extended influence across the globe that hit numerous disciplines like healthcare, finance, manufacturing and education. Artificial intelligence reshapes the way we live, work, and interact. It possesses a unique ability to process vast amounts of data, learn from patterns, and make predictions. It made a revolution in various fields, enabling automation, enhancing decision-making processes, and uncovering insights that were previously inaccessible. As we continue to explore the history of artificial intelligence, it is clearly that it passes over different stages before it reaches the current development.

2 - 1 - Historical Background of AI apps:

Initiation Period (before 1956)

According to the official textbook of Huawei ICT (Information and Communication Technologies) academy (2023), Alan M. Turing named "the Father of Artificial Intelligence". He created the Turing Test in 1950, which was considered as the formal starting point for contemporary artificial intelligence. He assumed that a computer was regarded as intelligent if it is able to communicate with people without being identified as an electronic device. Turing confidently claimed that devices could one day generate actual human intelligence. Nevertheless, no computer has ever been able to successfully complete the Turing Test until today.

Despite being a relatively new idea, artificial intelligence (AI) has a long history due to the development of its conceptual foundations and supporting technologies. The progress of all associated fields and the combined efforts of scientists across all eras have led to the present flourishing of AI. In the 4th century BC, The idea of formal logic, which was

Developed by the renowned Greek scientist and philosopher Aristotle, served as the conceptual framework for the development of artificial intelligence. Indeed, his syllogism theory remains a crucial and fundamental foundation for logical thinking to this day. In the 17th century, The German mathematician Gottfried Leibniz developed universal notation and other groundbreaking concepts for computation and thinking which paved the way for the creation and growth of mathematical logic. In the 19th century, the development of Boolean algebra by British mathematician George Boole which forms the foundation for modern computers' functionality and is responsible for their invention. At the same period, The British inventor Charles Babbage built the Difference Engine, which became the world's first computer that could solve algebraic polynomial calculations. This machine, despite its restricted functionality, was the initial device to decrease the computational load on the cognitive system of humans. Artificial intelligence was subsequently incorporated into the computers.

The Electronic Numerical Integrator and Calculator (ENIAC) was the first general-purpose digital electronic computer in history. John Mauchly and J. Presper Eckert of the Moore School created it in 1945. However, an epochal achievement, the ENIAC was not without fatal flaws, including its massive size, exorbitant power consumption, and dependency on human input and adjustment of commands. John von Neumann, the father of modern computing to modify and to improve the ENIAC, developed the contemporary electronic computer, or mathematical analyzer, numerical integrator and automatic computer (MANIAC) in 1947.

American scientist Warren McCulloch first proposed a neural network model in 1946. Neural networks were developed because of his groundbreaking research on artificial intelligence at the microscopic level. The fundamentals of synaptic plasticity outlined in Donald O. Hebb's 1949 known as Hebbian theory, a neuropsychological learning

Paradigm. It states that, when a presynaptic neuron repeatedly and persistently stimulated, a postsynaptic neuron will respond more favorably to synaptic transmission. In order to model neural networks, this theory is essential. In 1948, information theory pioneer Claude E. Shannon, who utilized a phrase from thermodynamics to define it as the average amount of information remaining after redundancy was eliminated, first established information entropy.

The development of AI after 1956

Significant milestones, breakthroughs, and periods of both optimism and skepticism have marked the development of artificial intelligence (AI) since 1956. Here is a detailed overview of AI's evolution from its inception to the present day:

1950s-1960s: The Birth of AI

- **1956:** The Dartmouth Conference marks the official founding of AI as a field. Key figures include John McCarthy, Marvin Minsky, Nathaniel Rochester, and Claude Shannon.
- **1958:** John McCarthy develops the LISP programming language, which becomes crucial for AI research.

1970s: The First AI Winter

- **1972:** Alain Colmerauer, supporting advancements in natural language processing and expert systems, introduces Prolog, a logic programming language.
- **1974-1980:** The first "AI Winter" occurs due to inflated expectations and under-delivered results, leading to reduced funding and interest.

1980s: Expert Systems and Revival

- **1980:** The rise of expert systems like MYCIN and XCON displays practical applications of AI in specific domains, rekindling interest and investment in AI.

- **1986:** The back propagation algorithm for training neural networks is popularized, spurring advancements in neural network research.

1990s: Machine Learning and Autonomous Agents

- **1997:** IBM's Deep Blue defeats world chess champion Garry Kasparov, demonstrating the potential of AI in complex problem solving.

2000s: The Rise of Data-Driven AI

- **2006:** Geoffrey Hinton and his team introduce deep belief networks, which contribute to the resurgence of deep learning.

2010s: Deep Learning Breakthroughs

- **2012:** AlexNet, developed by Alex Krizhevsky, Ilya Sutskever, and Geoffrey Hinton, wins the ImageNet competition, highlighting the power of convolutional neural networks.
- **2014:** Google's AlphaGo defeats professional Go players, achieving a landmark victory against world champion Lee Sedol in 2016.
- **2018:** OpenAI's GPT-2 displays the capabilities of large language models in generating human-like text.

2020s: AI Ubiquity and Ethical Considerations

- **2020s:** Continued advancements in transformer architectures, exemplified by models like GPT-3 and GPT-4, further push the boundaries of natural language processing and AI applications.
- Ethical and practical concerns regarding AI deployment, such as bias, transparency, and accountability, become central to discussions about AI's future.

This timeline illustrates the significant milestones and shifts in AI research and development, reflecting periods of rapid advancement, stagnation, and renewed interest. AI's journey from

Symbolic reasoning to deep learning and beyond highlights its transformative potential and the ongoing challenges in realizing its full promise.

In 1956, the concept AI was proposed at the Dartmouth Conference.

In 1959, Arthur Samuel proposed machine learning.

In1976, the failure of projects such as machine translation and the negative influence of some academic reports led to the reduction of investment to AI in all spheres.

In1985, the decision tree models with better visualization and multi-layer ANNs which overcame the limit of early perceptron was introduced.

In 1997, Deep Blue defeated the world chess Champion Garry Kasparov

In 1987, the market of ISP collapsed.

In 2006, Geoffrey Hinton and his students prompted the wave of deep learning.

In 2014, Microsoft released the world's first personal AI assistant Cortana.

In 2010, the world ushered into the era of big data.

In March 2016, AlphaGo defeated the world Go champion Lee Sedol by 4:1.

In October 2017, Deep Mind launched the strongest version of the program— AlphaGo Zero.

1950s   1960s   1970s   1980s   1990s   2000s   2010s   2020s

1956—1976
The First Booming Period
The definition and development target of AI was clarified at the Dartmouth Conference.

1976—1982
The First AI Winter
AI was under criticism and question: insufficient computing power, complicate operation, and hard to realize common sense and inference.

1982—1987
The Second Booming Period
The expert system with inference capacities based on logic and rules and can answer questions of certain fields prevailed. The fifth-generation computers developed.

1987—1997
The Second AI Winter
The technical fields ran into bottleneck once again. The abstract inference was no longer the focus of people and the models based on processing were not welcomed.

1997—2010
Recovery Period
Computing performance was improved, and the Internet technologies got popularized very quickly.

2010 — present
Rapid Growth Period
The new generation of information technology triggered the revolution in information environment and data foundations. The multi-model data built on massive images, voices and texts emerged. The computing power was greatly enhanced.

Figure 2 : a brief history about AI.

2 - 3 - AI Tools Revolution in Academic Writing

AI tools have transformed academic writing by reframing traditional techniques and providing new perspectives to ancient problems. The apps which modern natural language processing (NLP) algorithms help teachers, students, and researchers complete various writing assignments. Here' is how artificial intelligence applications are influencing academic writing.

2 - 3 - 1 - Machine learning translation tools:

Artificial intelligence (AI) in foreign language learning has emerged in the 21st century by mimicking learners' acquisition of languages. Online machine translation (MT) is one of the easy solutions For English language learners (ELLs) who are having difficulties with writing ((Bahri & Mahadi, 2016; Stapleton & Kin, 2019).

Due to its free availability, machine- learning translation tools are among the most often used in language learning. Google Translate (GT) is one of the biggest online servers used by enormous number of people around the world for learning languages. Its massive data-collecting network and artificial neural networks regarded as the foundation of advanced machine learning since 2016. It has enhanced translation accuracy by identifying content and displaying comprehensive translations in sentence units (Tsai, 2019).

Chandra & Yuyun (2018) claim that Google translate (GT) is the most famous online translation website that has the ability to translate words, sentences and paragraphs in just one click. It is very helpful for EFL students to complete their writing assignments especially writing essays, which considered as a very difficult task for them. GT is frequently used by EFL students to look for the words that have the same meaning in their first language also they use it as a grammar checker or to correct the spelling mistakes when doing the writing assignments.

2 - 3 - 2 - Automated Writing Assistance:

Grammarly is one of the artificial intelligence-powered tools specialized in writing assistance. Alex Shevchenko and Max Lytvyn to help students create it in 2009

Improve their writing skills by identifying and correcting grammatical errors, spelling mistakes, and punctuation errors in their writing assignments. It could be freely downloaded from the app stores or accessed in its official online website. In addition, it could be used in a variety of settings such as academic writing, business communication, and personal messaging (Wibowo et al., 2019).

2 - 3 - 3 - Language Generation:

Generative AI is another name for artificial intelligence language generation tools, which is a program that can produce text and create its own writings in response to commands. To comprehend common patterns in human speech and writing, generative language models are "trained" on a wide variety of content to estimate which word in a sequence is most likely to appear in a next. For instance, if someone said, "Not all heroes wear..." These language generation systems are able to generate texts that closely resemble to real human speech patterns by employing this prediction technique after being fed by enormous quantity of data (Sarah Beal.2023).

The year of 2022 has witnessed the release of ChatGPT which is created by OpenAI. It has significantly expanded the capabilities of language generators, even if they have been found for a while ago in the form of Chat bots and spellcheckers. ChatGPT uses a flexible and conversational methodology to related technologies like Google's Bard for providing answers, writing news articles, composing poetry, and content creation. This technology enables to response on the further queries, adjustments, and revisions and everyone can use these tools freely and broadly (Sarah Beal.2023).

3 - Types of Chatbots

Technology in the modern period has a profound effect on society. Chatbots are a technology that has gained popularity in conversational services since the development of the

best virtual assistants. Software applications that interpret and process natural language.are known as chatbots. Not only may chatbots assist users with basic chores like ordering movie tickets or locating the closest restaurant, but they can also be used as a source of entertainment, assist with home automation projects, offer advice on business strategies, and assist in other ways. A discussion of the different sorts of chatbots and their definitions in this paper. Additionally, a classification based on requirements, usefulness, and current market trends is suggested (Gupta et al, 2020, P.255).

Before the current technological era began, manual work was essential to every aspect of the industry. The development of chatbots has been aided by this contemporary progress in industries such as customer service. Nevertheless, not every chatbot fits into a single category. The simplicity of the UI, the algorithms, and the underlying technology are used to categorize chatbots.

In this chapter three types of commonly used chatbots will be discussed.

3 - 1 - Chatgpt Content Generative Tool

Within just one week of its initial public release on November 30, 2022, ChatGPT had gained over one million users. With its advanced ability to complete remarkably complex tasks, the generative AI tool ChatGPT surprised everyone. Teachers concerned about ChatGPT's remarkable capacity to carry out difficult educational tasks because this breakthrough in AI appears to be revolutionizing current educational practices. In order to present some possible advantages and disadvantages of ChatGPT in fostering teaching and learning, this exploratory study summarizes recent existing material. ChatGPT offers several advantages, such as fostering individualized and interactive learning, producing ideas for formative assessment tasks that offer continuous feedback to enhance instruction (Baidoo et al, 2023, P.52).

The study also identifies a few of ChatGPT's intrinsic drawbacks, including the possibility of incorrect information being generated, biases in data training that could exacerbate preexisting prejudices, privacy concerns, etc. The report makes suggestions for utilizing ChatGPT to enhance instruction and learning. Together, policymakers, researchers, educators, and tech specialists might initiate discussions on the safe and beneficial applications of these developing generative AI technologies to enhance instruction and facilitate students' learning.

3 - 2 - Grammarly Error Solver

Grammarly is said to be the best writing assistance for researchers available online. Either when it comes to grammar or other writing-related topics, Grammarly provides in- depth reports. Text is examined for hundreds of different kinds of English grammar errors using Grammarly's grammar checker. Students, scholars, researchers, and academic staff can all write more effectively and effortlessly thanks to Grammarly's guidance. Through direct use, the instrument will address the problem of writing at the local level and influence national production. To guarantee that their content is flawlessly perfect in terms of Form, Style, and Structure, a variety of professionals, including researchers, academics, writers, bloggers, students, and business professionals use Grammarly. More than 250 different types of writing, sentence construction, format, vocabulary, and wordiness mistakes are checked for with Grammarly.

3 - 3 - Quillbot Paraphrasing and Summarizing Assistant

Quillbot is an online paraphrasing tool that can paraphrase any text using state-of-the-art artificial intelligence. Quillbot's paraphrase feature modifies the original sentences, allowing writers to easily edit and rearrange the material from the source. Numerous researchers have shown an interest in Quillbot's application in research writing. According to a number of studies on Quillbot's effects on academic writing, students can benefit from this online tool in

a number of ways, such as summarizing complex sentences, avoiding plagiarism, and improving language to seem more polished and clear (Fitria, 2021; Fitria, 2022; Rahkmanina & Serasi, 2022; Nurul & Siti, 2021; Kurniati & Fithriani, 2022). Furthermore, Quillbot is a time-saving tool that can improve the text's clarity and help locate relevant synonyms, according to Fitria (2022). Quillbot is widely used by millions of individuals worldwide, including students, writers, bloggers, and businesses, because to its extensive vocabulary and user-friendly interface.

Few researches have been done on how students, and EFL learners in particular, perceive Quillbot's use in academic writing. Kurniati and Fithriani (2022) find that students view Quillbot as a useful online tool to help them with academic research writing when they look into the opinions of post-graduate students in Indonesia. According to a research by Hieu et al. (2022), Vietnamese EFL students report that Quillbot has improved their writing abilities.

4 - The Importance of Using AI in Academic Writing

Technological growth alters the course of our life radically. As AI powered tools are ingrained in every aspect of the modern world, but our focus this research is academic writing, so There has been a lot of excitement in the scientific community about the use of generative artificial intelligence (AI) in academic research writing. Academic researchers have shown a particular interest in AI-powered tools like ChatGPT and Bard since ChatGPT's initial free research release on November 30, 2022. Academic scholars are using these AI-powered tools more often to help them at different phases of the writing process. By expanding on the authors' original concepts and offering insightful recommendations for enhancing the current content, generative AI systems help writers produce first drafts. Generative AI technologies provide academics a new method for generating ideas, extending the reach of research writing and stimulating creative thought processes with its human-like replies and contextual understanding. There's no denying that the environment of academic

research writing has changed with the widespread adoption of generative AI techniques (Tang et al, 2023, P.314).

4 - 1 - Elevating Creativity and Efficiency

Writing tools powered by artificial intelligence have gained recognition for their capacity to support students in creating essays, providing grammar and style recommendations, and streamlining the creation of material. According to Gayed et al. (2022), AI writing tools improve students' writing ability and self-efficacy. These resources have shown to be beneficial tools for students, particularly when it comes to developing writing abilities and giving prompt feedback. To strengthen their contextual understanding and efficacy across a range of topic areas, Makarius et al. (2020) emphasized the necessity for additional advancements in AI tools. Concerns concerning ethical issues and educators' roles are also brought up by AI's incorporation into academic essay writing. Su et al.'s (2022) investigation of the effects of AI on education came to the conclusion that, although AI tools can be useful for giving feedback, teachers' direction is still crucial for encouraging critical thinking and creativity. Regarding ethics, Chaudhry et al. (2023) looked at the applications of AI in plagiarism detection, emphasizing the necessity for precise rules and teaching students about the appropriate application and limitations of AI(Malik et al, 2023, P.02).

5 - Pros and Cons of Ai tools

Artificial Intelligence (AI) in education comes out with a multitude of benefits; it can change conventional teaching methods and improve the quality of education as a whole. One of AI's main benefits for education is personalized learning, which enables content to be delivered according to each student's needs and learning preferences. This method takes into account different learning styles and pacing, which creates a more productive and interesting learning space. Moreover, by the automation of repetitive processes, AI greatly increases

Educational efficiency. Personalized instruction and student support can give more attention by instructors due to timesaving resulting from automated grading systems, data analysis, and administrative processes. This enhanced effectiveness not only simplifies the teaching process but also enables teachers to give students more timely and focused feedback.

On the contrary, AI has also several drawbacks, As an illustration there are several obstacles to overcome when integrating AI into education, including ethical issues like algorithmic bias and human-AI interactions as well as technological ones like data security and privacy. Trust in technology may be damaged by the lack of openness in many AI systems, which makes it difficult for educators and students to comprehend how decisions are made. Even with AI-powered educational systems, human oversight is still necessary for vocations like evaluation and grading, which still require human skill. Researches, educators, legislators, and students must work together to implement ethical and responsible AI in the classroom (Kizilcec et al., 2017).

The application of artificial intelligence (AI) in the classroom has several drawbacks. A lot of people are concerned about ethics, which includes things like algorithmic bias, data privacy, and the possibility of unexpected consequences when making decisions. the loss of human interaction are particularly heightened by the increased reliance on AI in education, since algorithm-driven tailored learning experiences may lessen the vital teacher-student and peer interactions that support holistic learning. Furthermore, there is a chance that the growing reliance on technology could exacerbate educational disparities and leave pupils unprepared for a society that requires a balance between technical and interpersonal abilities. These worries highlight the significance of adopting a careful and moral framework when integrating AI into education to make sure that technology enhances rather than takes the place of the crucial human components of the educational process.

5 - 1 - The Advantages of ChatGPT in Writing

The capacity of ChatGPT-3 to support research is one of its main benefits for academic writing. It can produce abstracts from papers, highlight important ideas, and even include references. This can free up a lot of time and energy for researchers, enabling them to concentrate on crucial duties like analysis and interpretation. It also helps in writing, which is a benefit. Essays, dissertations, and research papers are just a few of the academic works for which ChatGPT-3 can provide text. Additionally, it can offer feedback on coherence, style, and grammar, which can help authors get better at what they write. Furthermore, ChatGPT-3 is an efficient teaching and learning tool since it can comprehend and react to intricate cues. For example, it can help students comprehend and summarize challenging readings and provide ideas for writing assignments. It is crucial to remember that ChatGPT-3 cannot replace human intellect or creativity. Rather than taking the place of academic writing, it ought to be utilized as a tool to support it. Furthermore, while ChatGPT- 3's output is not always 100% accurate, the user should fact-check and examine it (Aljanabi et al, 2023, P.62-46).

5 - 2 - The Disadvantages of ChatGPT in Writing

Some of the common cons concerning this new technology are illustrated as follows

- ➢ Lack of Expertise: ChatGPT can only produce content based on the text data given to train it; it is not an expert in any scientific topic. Consequently, it might not be able to offer accurate or reliable information, specifically in fields of science that are complex.

- ➢ Lack of Context: ChatGPT might not have access to the particulars of the pertinent experiment(s) or the context of the proposed research, which could result in inaccurate information being generated.

➢ Danger of Plagiarism: A sizable corpus of text data, including previously published academic papers, is used to train ChatGPT. As such, it could lead to the creation of content that is identical to previously released material. Because ChatGPT can produce language that looks like human writing. Researchers may unintentionally copy its content because it might not be original. Therefore, it is crucial to make sure that the content that is generated is original and correctly cited.

➢ Misinterpretation: ChatGPT has the potential to misunderstand the research topic or question, which could result in inaccurate content been produced. Researchers are required to guarantee that the data entered into ChatGPT is accurate and unambiguous.

➢ Technical Restrictions: ChatGPT might not be able to comprehend scientific jargon and technical terms. Researchers need to make sure that the material they produce(Nayak, 2023, P.01).

6 - The Benefits of Adapting AI in Writing

Incorporating artificial intelligence (AI) into writing, it fosters new forms of expression, improve productivity, and boost creativity. The artificial intelligence (AI) applications that support writing is a technical advance to enhance academic research in the future by matching human creativity and automating tasks that are frequently performed. Among the benefits of adapting AI in writing are improving productivity, enhancing the the quality of academic work and offering content in multiple languages.

6 - 1 - improving productivity

Singh et al and Pinkwart (2016) demonstrate how AI may be used to handle massive amounts of writing tasks from students. It has a significant impact on increasing the effectiveness of managing writing projects. It is also able to swiftly assess student writing

through the use of an automated scoring system. Sentence structure, clarity, and language use are just a few of the areas on which intelligent algorithms can automatically assign ratings or offer feedback. This minimizes the burden for teachers and allows them to concentrate on other areas that need more emphasis in evaluation. Moreover, additional information about the quality of the writing produced by learners can be obtained by utilizing AI-powered text analysis technologies. AI is capable of analyzing things like expression clarity, argument continuity, and word choice correctness. Through the operations, students can receive more precise and deep feedback that will assist them to recognize the advantages and disadvantages of their writing. As a result, AI simplifies the evaluation procedure that will enhance the overall quality of their production.

6 - 2 - Enhancing the Quality of Academic Work

Hwang et al and Verma et al (2016) emphasized how AI may help researchers to write better by offering them individualized remarks. AI is able to assess each writer's style, offer advice on how to do better, and provide targeted instruction for individual students. The researchers' writing abilities may be developed more successfully because of this. AI is able to examine students' writing styles that includes Sentence structure, word usage, and grammatical faults and offer feedback that is more targeted and detailed.

AI can also offer suggestions for customized enhancement. It is capable to provide personalized improvement suggestions for every researcher's writing by using algorithms that are able to comprehend their unique demands. AI, for instance, might point out overuse of certain terms, offer alternative words or phrases, and identify potential areas of improvements in either writing essays or research papers. It can also offer individual advice based on the needs of the researcher. This entails giving guidance for new ideas, enhancing the organization of writing, and fortifying arguments. As a result, AI not only offers corrections but also acts as a virtual mentor, giving learning instructions that are specific to the needs and

Ability level of each researcher . By using AI to provide tailored feedback, researchers can improve their writing abilities more successfully. They can make development in some areas of their writing skills with a more focused approach and wise advice. Furthermore, by using a customized approach, a flexible learning environment is created in which researchers can receive support that is appropriate for their level.

6 - 3 - Offering Content in Multiple Languages:

Akgun & Greenhow and Holmes (2022) highlight how AI can facilitate multilingualism. It is capable of doing translation across languages, propose substitute words and sentence constructions in other languages, and facilitate cross-cultural communication by giving users simple access to multilingual writing materials. AI can assist students who speak different languages in accessing and comprehending instructional materials in their native tongue by use the of automatic translation technologies. In addition to guaranteeing that students from multilingual backgrounds can better understand the teachings process. This fosters an inclusive learning atmosphere.

In many languages, AI can provide substitute words and phrase constructions. Students can express their ideas and thoughts in a way that complies with the grammatical norms of the language they are using. It also helps them expanding their vocabulary. Multilingual communication abilities can now be developed as a result of that.

7 - Comparison between Manual Writing and Computer-assisted-writing

As the usage of technological devices rises, traditional handwriting is getting less popular. Many different occupations rely mostly on technology to do their their jobs. Computers and other electronic devices are used as educational materials at every level of school to study, to complete assignments, take classroom notes and search for further information. The usage of computerized technologies is frequently linked to advancements

and innovations of the teaching and learning process, however there are some differences between manual writing and computer-assisted-writing.

The major distinction between manual writing and computer-assisted-writing is how text is written. It is either by handwriting on the paper or by typing on the computer.

Manual writing is mostly done on papers. It needs people to produce the alphabets and symbols grapho-motorically. The process of writing also requires more concentration on the writing surface. This makes the handwriting a slow operation, due to the deep integration of cognitive and intentional resources with motor and perceptional abilities. It becomes a lengthy and challenging task (Mangen and Balsvik 2016).

In comparison to manual writing, computer writing is a writing modal that is less time-consuming and quicker but also more practically repetitive, impersonalized, and disembodied. (Mangen and Balsvik 2016; Mangen and Velay 2010) Writers have to split their focus between the keyboard and the screen, instead of utilizing their own brain systems to produce each sentence. Writers use already made symbols that make typing easier (Mangen and Velay 2014). Moxley et al found that typing facilitate writing for the following reasons:

01- Students who lack fine motor skills necessary to form manuscript letters can produce letters with finger-strokes.

02- The writing children produce with a computer is the same as writing they read in books and allows them to recognize misspellings more easily.

03- Erasing or revising a letter or word is more accomplished on a computer word processor than on paper.

04 -Graphics representation software allows for self-selected pictures to aid students in their writing.

8 - The Implications of Integrating AI in Research

The scientific landscape is undergoing a significant transformation due to the burgeoning integration of Artificial Intelligence (AI). This integration holds immense potential for accelerating scientific discovery, enhancing research efficiency, and fostering innovation across diverse disciplines (Char et al., 2021). However, alongside these exciting possibilities lie important considerations and potential pitfalls that demand careful attention.

8 - 1 - Positive Implications of integrating AI in research

8 -1 - 1 - Enhanced data analysis

Contemporary research, particularly in fields characterized by "Big Data," often involves handling massive datasets. AI excels at tackling such challenges. AI algorithms can automate data cleaning, feature extraction, and analysis. It can uncover patterns and make relationships that might elude traditional methods (Varma et al., 2019). This significantly reduces research timelines and allows researchers to dedicate more time to interpreting results and formulating new hypotheses (Luo et al., 2023).

8 - 1 - 2 - Literature review and knowledge discovery

AI-powered tools can significantly streamline the literature review process. These tools can rapidly identify relevant studies, summarize key findings, and even unearth connections across seemingly disparate research areas (Abbasi et al., 2016). This empowers researchers to stay current with the ever-expanding body of scientific knowledge and fosters interdisciplinary collaboration (Sun et al., 2020).

8 - 1 - 3 - Hypothesis generation and experiment design

AI can analyze existing data to suggest new hypotheses and guide experimental design. This is particularly valuable in complex fields where pinpointing the most promising avenues

For investigation can be challenging (Leng et al., 2021). AI-driven approaches can help researchers identify subtle relationships within datasets, leading to the formulation of novel research questions.

8 - 2 - Negative Implications of Integrating AI in Research

While AI offers significant benefits for research, it is important to acknowledge the potential drawbacks and challenges:

8 - 2 - 1 - Bias and inaccurate results

AI algorithms can inherit and amplify biases present in the data they are trained on. This can lead to skewed results that misrepresent the underlying phenomenon or reinforce existing inequalities (Brundage et al., 2020). Researchers need to be critical of their data sources and mitigate potential biases through careful selection and pre-processing.

8 - 2 - 2 - Over-reliance and lack of critical thinking

There is a risk of researchers becoming overly reliant on AI for analysis and interpretation, potentially neglecting crucial steps like critical evaluation and hypothesis formation (Char et al., 2021). It is essential to maintain a balance, using AI as a tool to augment human expertise and not to replace it.

8 - 2 - 3 - Misinterpretation and "Black Box" issues

Complex AI models, particularly those based on deep learning, can be difficult to interpret. Researchers might struggle to understand how the model arrives at its conclusions. Because it sometimes masks errors that lead to getting vague information (Lipton, 2018). Efforts are crucial to develop more interpretable AI models for research applications.

8 - 2 - 4 - Job displacement and skill Shift

While AI automates tasks, it is unlikely to replace researchers entirely. However, the skillset required might shift. Researchers may need to adapt and develop expertise in working with AI tools alongside their traditional research skills (Bryn jolfsson & McAfee, 2017).

8 - 2 - 5 - Ethical considerations

As AI becomes more sophisticated, ethical concerns regarding data privacy, ownership, and responsible conduct of research become paramount (Char et al., 2021). Researchers need to be mindful of potential misuse of data in order to ensure informed consent when applicable, and to comply with relevant ethical guidelines.

9 - The integration of AI Tools in Teaching Writing

Bhutoria) 2022(illustrated that artificial intelligence (AI) apps and platforms provide learners with individualized learning experiences to analyze their writing capabilities and mistakes. This enables teachers to modify their lesson plans in accordance with specific needs and interests of all learners, paving the way for more successful learning results (Dogan et al., 2023). Likewise, Cahyono et al.'s (2023) investigated the practical strategy for teaching writing that is assisted by mobile technology which reveals an additional level of tech-enabled pedagogical innovation. Due to this highly developed technology, learners are encouraged to submit what they write in public spaces. This increases the sense of self-worth and boosts the writing skills. AI-powered writing technologies must be utilized and promoted with careful educated distinction based on integrated practices, goals, and expectations. alternatively, the appropriate use of these technologies should be determined by how well they are aligned with curriculum and pedagogical goals, not by how convenient they are(Z. Li :2021).

Ranalli (20121) showed how teachers could integrate AI writing tools in teaching writing. He recommended that learners could evaluate automated writing evaluation (AWE) feedback

Critically in order to assess its efficacy and usage. He also suggested providing students with piece of writing for proofreading, in which they must find mistakes and try to correct them. Such exercise is very useful to give learners practical experience that will enable them to become knowledgeable users of language-assistance tools.

John and Woll (2020) stated that teachers might invite their students to use an automated writing corrective feedback (AWCF) tool to verify their writing work to search for a particular kind of mistakes and see if the technology detects them. For instance, Grammarly's classification function might be utilized to target particular grammar points. One further method of incorporating writing support tools into second language learning is to look for writing assignments that include particular content that has been learned previously and consider them as strong incentives for learning.

Knowles (2022) proposed that teachers might require from their learners to create checklists of certain grammatical and vocabulary terms depending on their experiences using the writing assisted tools. He recommended that Google Translate could be used as a template for the assessment criteria, which should include grammar and vocabulary identification.

Furthermore, Pellet and Myers (2022) advised to provide a task that makes the use of Google Translate as a motivation for students to do connections between latest research subjects and their experiences. Moreover, Teachers allow students to discuss the socio-pragmatic elements in a text translated by Google Translate in that activity. In addition, they might request the students to keep a journal of their interactions with the writing assisting tools in order to utilize it for the upcoming reflective writing assignments. Any approach for integrating intelligent writing assisting technologies into the classroom, it should include practical classroom experiences as well as teacher mediation, but many researchers have also demonstrated the value of clearly delivered instruction and structured guidance. A part of that process, Training learners and teachers on the restrictions of such intelligent writing assisting

Tools, as well as the kinds of writing assignments and activities they are most appropriate

for them (W.Alharbi:2023)

Conclusion:

The exploration of the foundational aspects of academic writing and the integration of artificial intelligence in this process has revealed significant insights into the transformative potential of AI tools. This chapter has elucidated the intricate nature of writing, highlighting its essential role in academic success and the complexities involved in producing high-quality written work. The examination of various forms and processes of writing underscores its multifaceted nature, which is crucial for effective communication, critical thinking, and scholarly achievement. The incorporation of AI in academic writing, through tools such as ChatGPT, Quillbot, and Grammarly, represents a pivotal advancement in educational technology. These AI tools offer notable benefits, including enhanced grammatical accuracy, improved stylistic quality, and streamlined content organization, thus facilitating the writing process and enabling students to refine their skills more effectively. The chapter's comparative analysis between traditional manual writing and AI-assisted writing has provided a nuanced understanding of the evolving landscape of academic writing.

AI's implications extend beyond mere technical assistance, influencing research methodologies, pedagogical approaches, and the broader educational experience. By offering immediate, personalized feedback and aiding in idea generation, AI tools have the potential to significantly enhance writing proficiency. The theoretical insights gained from this comprehensive analysis support the hypothesis that AI-powered writing tools can substantially improve academic writing skills. This sets the stage for further empirical investigation to assess the practical impact of these tools on students' writing proficiency, thereby contributing to a deeper understanding of the role of AI in shaping the future of academic writing.

Chapter Two: Practical Part

1- Introduction

This chapter aims to explore teachers' perspectives towards the impact of using ChatGPT, QuillBot, and Grammarly on students' writing skills. It is dedicated to address the problem, answer the questions, and fulfil the research objectives. To achieve this, both teacher and student questionnaires have been employed. The questionnaires were distributed to teachers

And Master one students who teach and study in the Department of English at Mila University Centre. This chapter is divided into two main sections. The first one focuses on the student questionnaire, while the second one delves into the teacher questionnaire. Each section deals with the explanation of the research methods and the sample selected for our research work as well as providing a description of teachers and students' questionnaires. In addition, this chapter gives a detailed analysis of the data obtained from both questionnaires, followed by discussion of the results. The chapter ends up with presenting the main findings of the study.

2 - Section One: Students' Questionnaire

2 - 1 - Population and Sample

The current study is conducted in the Foreign Languages Department at Mila University Center. The population of our study is Master one English language students in the academic year 2023/2024. we have randomly selected a sample that consists of 56 students. The reason behind selecting M1 students of English, is that students have more experience in writing and in learning the language in general ,simultaneously learners at this level seem to be more affected by the use AI writing assisting tools like Chatgpt, Quillbot and Grammarly while learning English writing skills and doing thee writing assignments given by their teachers either in or outside the classroom.

2 - 2 - Description of the Students' Questionnaire:

In this study, the questionnaire was delivered to 56 M1 English students at Mila University Center. The questionnaire is made up of twelve questions. It is divided into three sections that include mixture of questions that require the participants to choose one option, and open-ended question that requires them to give answers in a form of short paragraphs. The first section entitled "General Information". It consists of three questions (Q1- Q3) aims for gathering information about students' level of English writing, their interest about doing writing assignments inside or outside the classroom and their satisfaction about the amount of hours that are specified to do the writing assignments inside the classroom. The second

Section is entitled "Writing Skill" and consists of three different questions (Q4–Q6). It aims at collecting data about students' perspectives towards the writing assignments. In order to know the types of writing assignments that students usually do inside or outside the classroom, the common challenges they may find while doing the writing compositions. The third section is entitled "Artificial intelligence and writing skills". It includes six questions (Q7–Q12). It is designed to explore how students use AI writing assisted tools (Chatgpt, Quillbot and Grammarly) in doing writing assignments like paraphrasing, summarizing, writing paragraphs, writing essays, grammar checking and correcting spelling mistakes. Furthermore, students' Perceptions towards the Influence of AI writing assisted tools on Their Writing Performance and its integration in learning and teaching writing.

2 - 3 - Analysis of the Students' Questionnaire

Section One: General Information

Q1/ How do you evaluate your level of English writing?

Graph: 01

Students' level of English writing
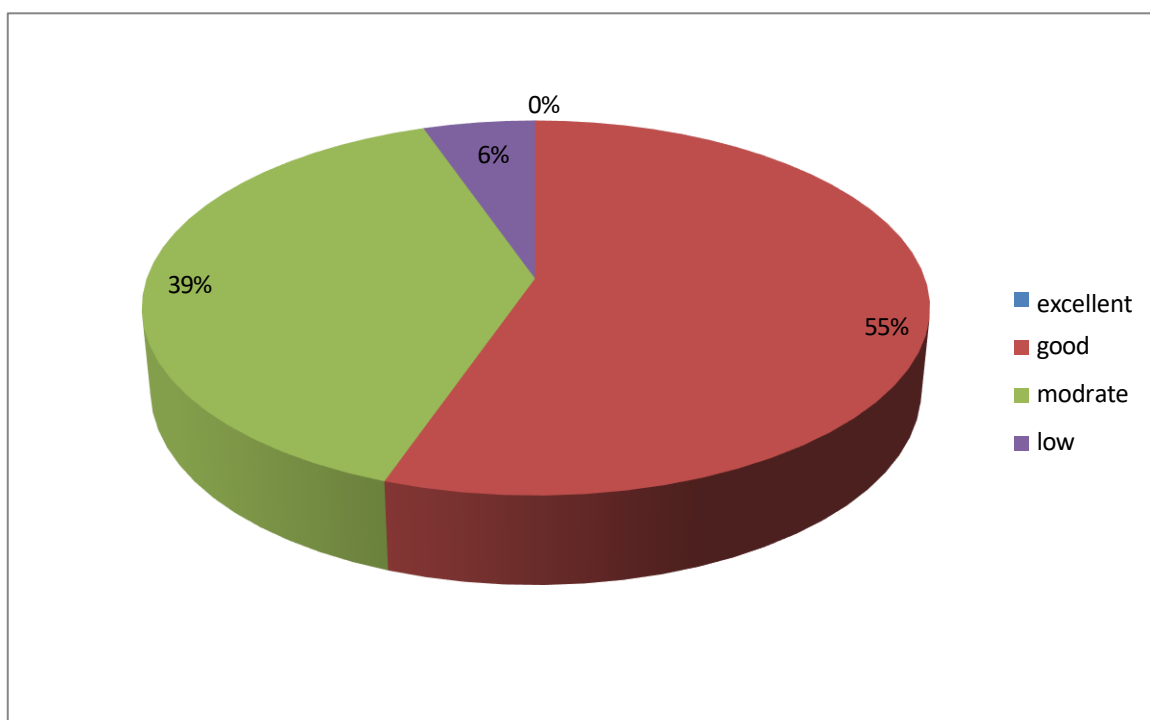
Graph 01 shows how students evaluate their level of English writing. The majority of them

(55%) said that they have a good level in English writing. this may be due to their prior knowledge of English language which helps them achieve a good writing skills like: good command of grammar, vocabulary enrichment and language structure. In addition, the exposure to good writing materials. For instance, Students who frequently read high-quality writing (books, articles) might acquire effective writing styles unconsciously. In addition, motivation from teachers play a crucial role in enhancing the writing level of students. 39% of students declare that they have a moderate level of English writing. These students maybe they do not know where they categorize themselves because they still learning and practicing writing activities to reach the good level of English writing. The remaining 06% of students think that they have low English writing. Students might face challenges with grammar, vocabulary, and expressing ideas clearly. This could be due to learning difficulties, limited prior exposure to English writing, or lack of confidence as they receive a negative feedback on their writing assignments. Finally, no one have said that they have an excellent level of English writing.

Q2/ how much are you interested in doing writing assignments inside the classroom?

Graph: 02

Student's interest about doing writing assignments.
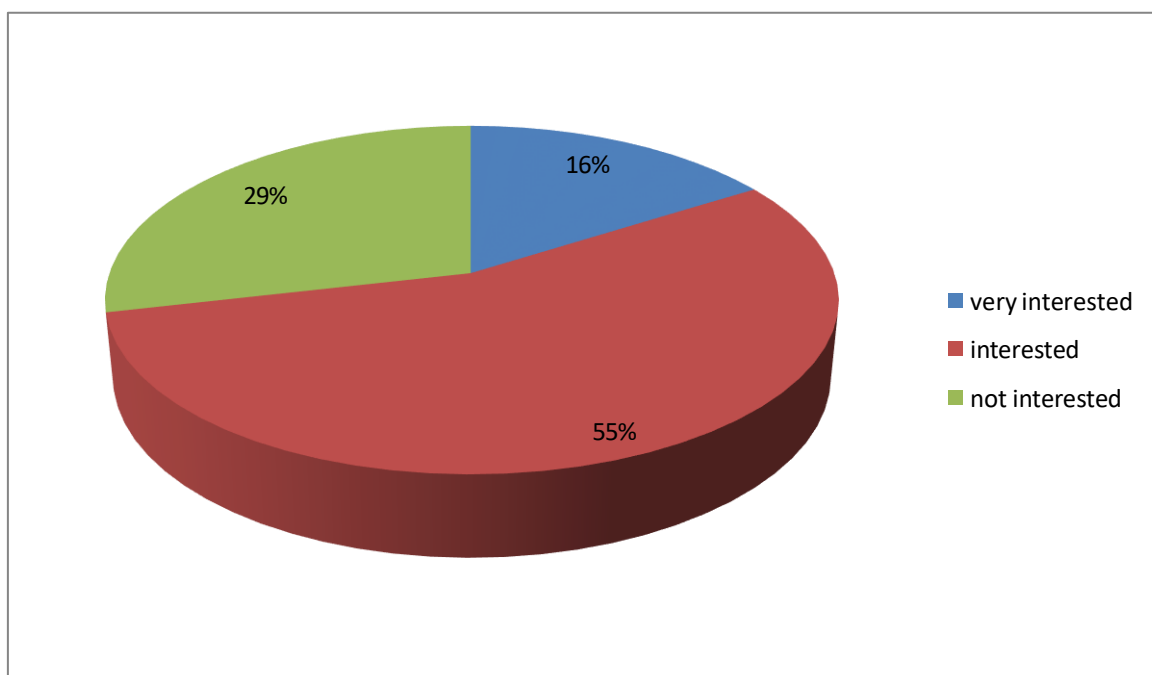
Graph 02 demonstrates that 55% of students who represent the majority show their interest in doing writing assignments inside the classroom. Students genuinely enjoy the

Process of writing and using language creatively. Also completing a writing assignment inside the classroom successfully, and receiving positive feedback can be a source of motivation and satisfaction. In other way, Collaborative writing projects or group discussions can make writing more engaging and foster interaction with peers. Furthermore, Students might recognize the writing process as a tool for deeper learning and retention of material. While 29% are not interested in doing writing assignments inside the classroom. Some students might struggle with aspects of writing like grammar, spelling, or organization. This can lead to frustration and a lack of interest in writing assignments. Having negative experiences with writing as if receiving negative feedback in the past might make students afraid of getting criticism. This fear can make them avoid writing tasks altogether. The remaining 16% said that they are very interested in doing writing assignments inside the classroom. Students with a strong interest in the topic of the writing assignments are highly

Motivated to engage with it through writing. Understanding the importance of strong writing skills for college or future careers might particularly push students to invest in improving their writing skills through doing writing assignments.

Q3/ are you satisfied with the amounts of hours that are specified for doing writing assignments inside the classroom?

Graph: 03

Frequency of Practicing Writing inside Classroom
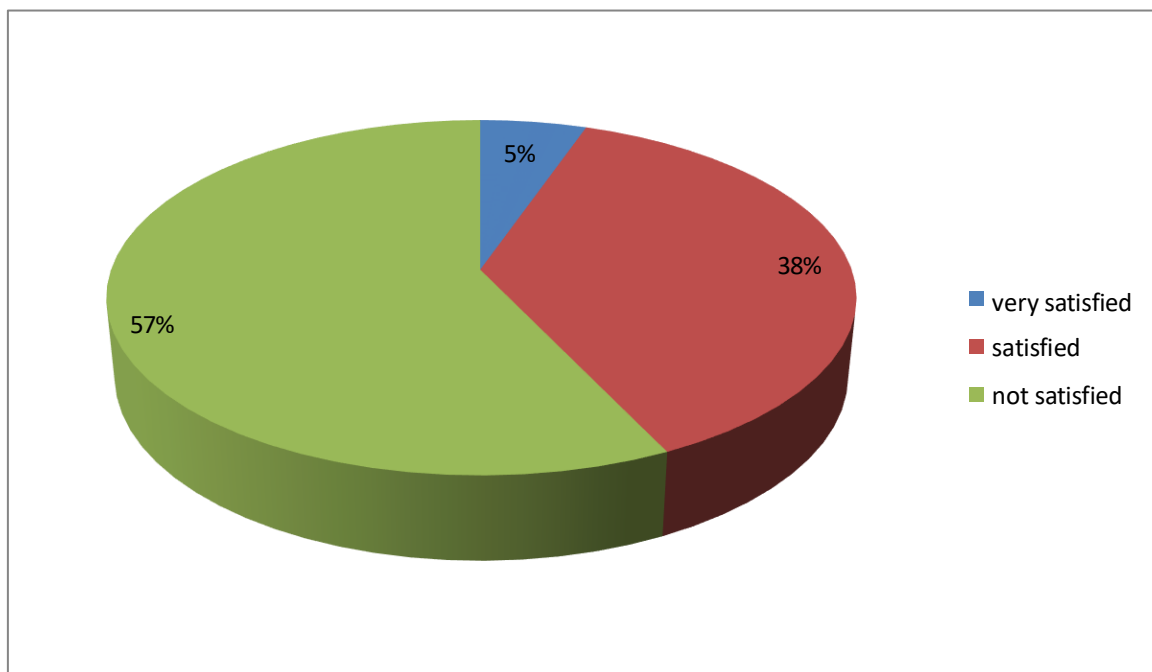
Graph 03 demonstrates the frequency of practicing writing inside classroom. The findings of the above graph show that the majority of students (57.14%) report that they are not satisfied with the time specified for writing assignments inside the classroom. The reason behind this maybe the intensity and verity of lectures to be dealt with. Master one students at the Mila University Centre study a lots of modules that is why make time management between the modules hard. Whereas, 38% said that they are satisfied with the amounts of hours to complete the writing assignments inside the classroom. Students successfully manage their time within the allotted window to complete the writing compositions given by

The teachers in the classroom. Moreover, students with prior experience with similar writing tasks might be more confident in their ability to complete them within the timeframe. The left 05% might genuinely enjoy writing and find the process more time-consuming than necessary, leading them to feel satisfied even if they could finish faster.

Section two: writing skills

Q4/ How often do you do writing assignments ?

Graph: 04

Students' commitments about doing writing assignments
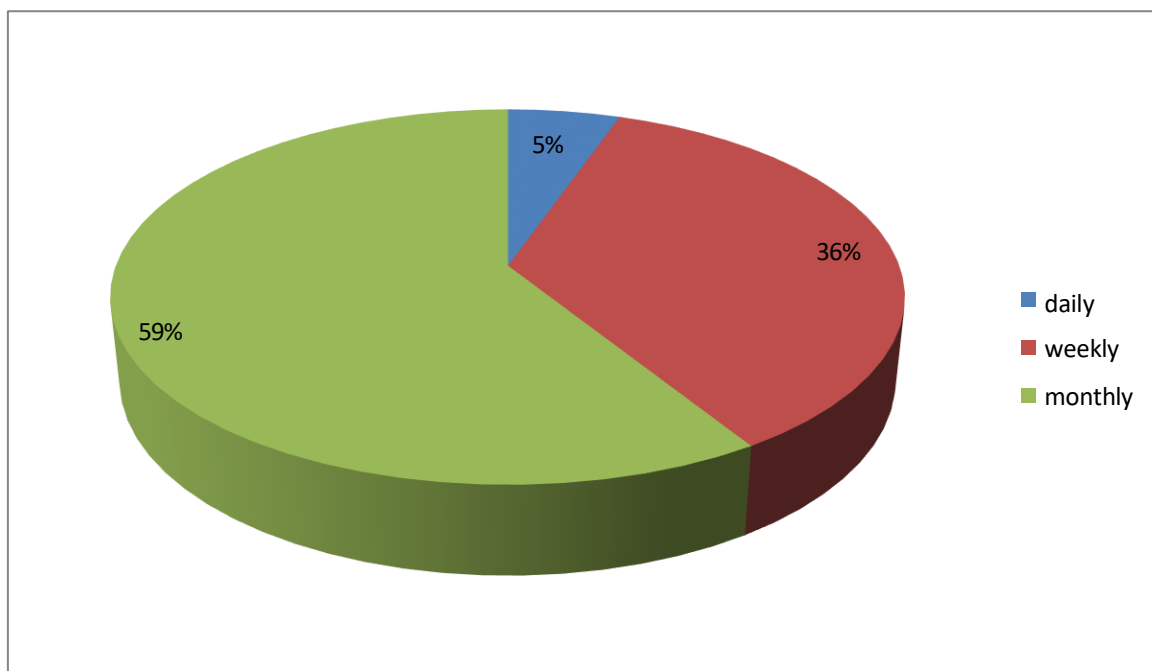
The graph 04 clarifies students' commitments about doing writing assignments in general. 59% of students are committed to do writing assignments monthly like research papers, essays, or analytical assignments requiring significant time to accomplish. The other 36% do the writing assignments weekly to practice specific writing skills learned in class and do regular activities, in addition to shorter writing compositions given by the teacher to provide ongoing feedback and monitor student progress. The remaining 05 % said that they are committed to do writing tasks daily like short answer questions and classroom writing exercises to learn and improve creative writing quickly.

Q5/ What are the writing assignments you usually do inside and outside the classroom.

Graph: 05

The students do types of writing assignments that
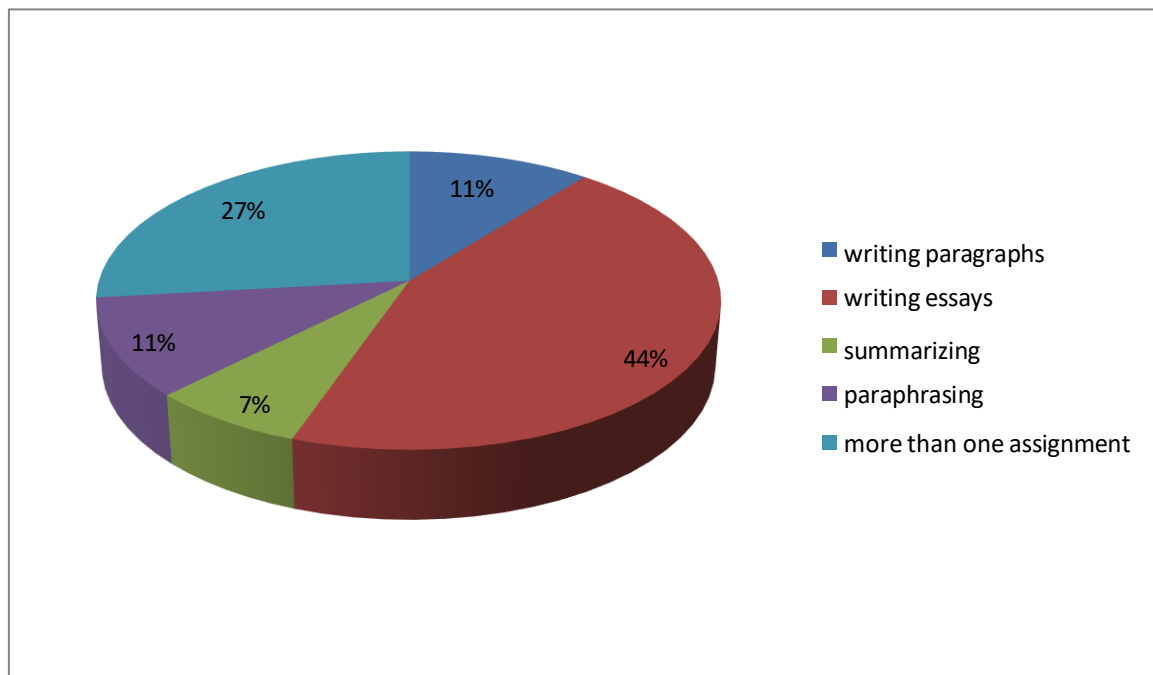
Graph 05 illustrates the types of writing assignments that the students usually do inside and outside the classroom. 44% of the students answer that they frequently write essays, due to the teachers' emphasis on developing the comprehensive writing skill for students like critical thinking and analytical abilities. 27% do more than one writing assignment because of the exposure to a variety of writing activities given by teachers or students voluntarily engage

In multiple writing assignments based on their interest and career aspiration. 11% of respondents focus on writing paragraphs; it may help them to enhance their fundamental writing skills like coherence and cohesion. The writing paragraphs tasks can be offered by teachers or doing by students themselves intentionally. The other 11% practice paraphrasing in order to boost their academic writing and avoid plagiarism. The remaining 7% devote themselves to summarizing since it is another writing skill required for doing academic research.

Q6/ What are the difficulties that you usually face when doing writing assignments.

Graph: 06

Some of the difficulties that learners often encounter when they conduct a writing activity
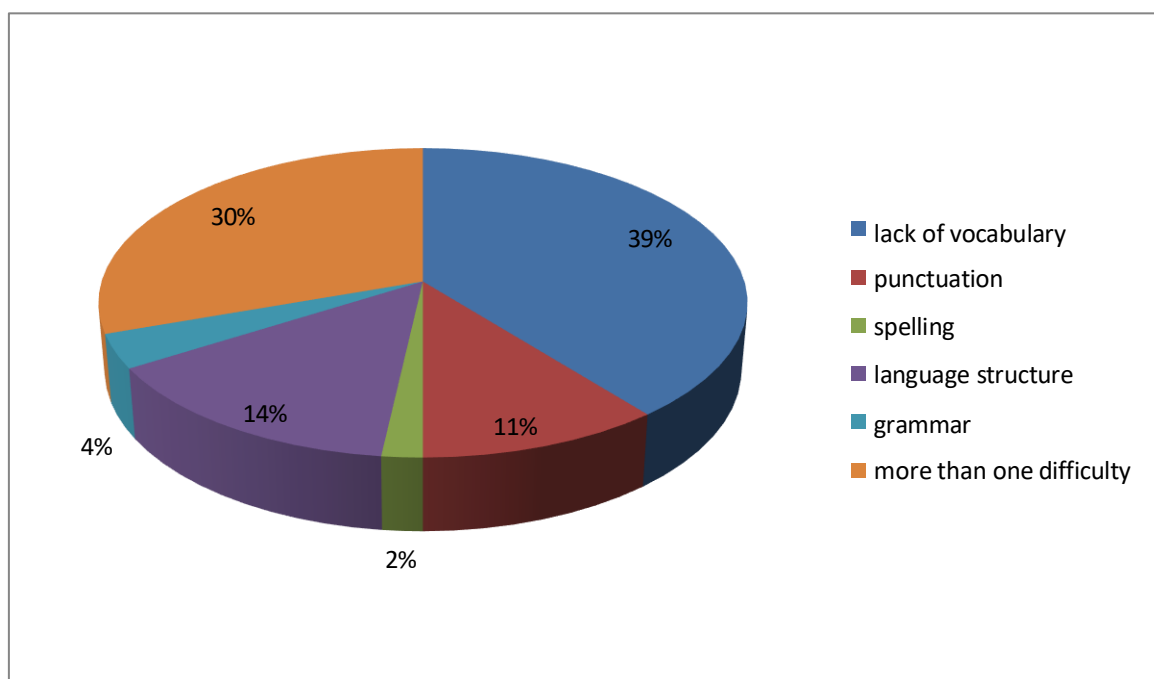
Graph 06 displays the percentage of participants that answer the questionnaire, the large portion of them that is made up of 39% see that lack of vocabulary is the most difficult aspect of writing because writing is about vocabulary in the first place. Another large group of them around 30% says that they frequently bump into more than one difficulty. Struggling with multiple aspects suggests a need for a more holistic approach to writing instruction, 14% of those respondents face difficulty with sentence structure. It can be related to a lack of understanding of grammar rules, sentence types, or how to construct clear and concise sentences. Also 11% of them say that they struggle with punctuation, Difficulty with

Punctuation suggests students might struggle with sentence structure or clarity. A small number of 4% faces obstacles in grammar, that is to say, grammar issues can affect clarity and professionalism. This could indicate a need for reinforcing grammatical fundamentals.

Only a few of them struggle with spelling. Those difficulties can be a significant barrier for some students. It can hinder communication and lead to decreased confidence.

Section three: artificial intelligent and writing skills

Q7/ How often do you use chatGPT, Quillbot, and Grammarly in doing writing assignments?

Graph: 07

The frequency of using Chatgpt, Quillbot and Grammarly
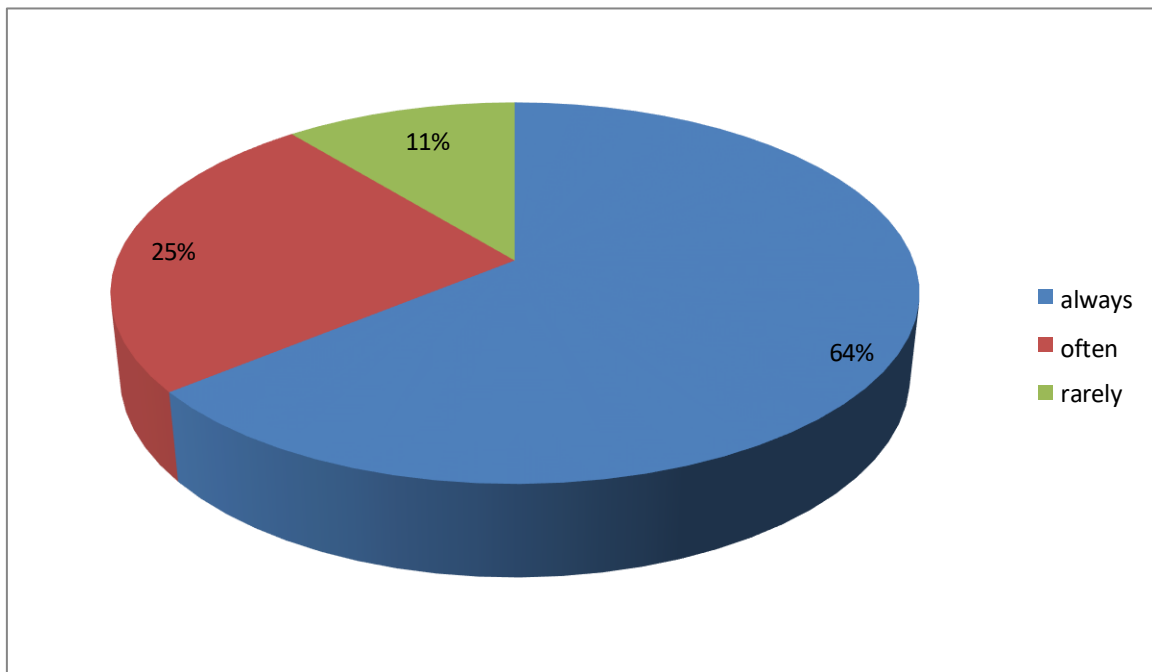
Graph 07 showcases that a large number of participants consist of 64% uses chatbots all the time because AI tools can offer faster writing processes, suggesting students might be pressed for time or struggle with specific aspects of writing. Another portion of 25% of the sample answer that they use it very often, it is seemingly flagrant that they rely on these tools to address difficulties like grammar mistakes, limited vocabulary, or struggling to express ideas clearly. Finally the smallest portion say that they use only under some circumstances because Tools that paraphrase or generate content raise concerns about plagiarism if not used responsibly. And they might become dependent on the tools, hindering their ability to develop their own writing skills.

Q8/ in which writing assignments do you use Chatgpt?

Graph: 08

What are the writing assignments learners prefer to use ChatGPT
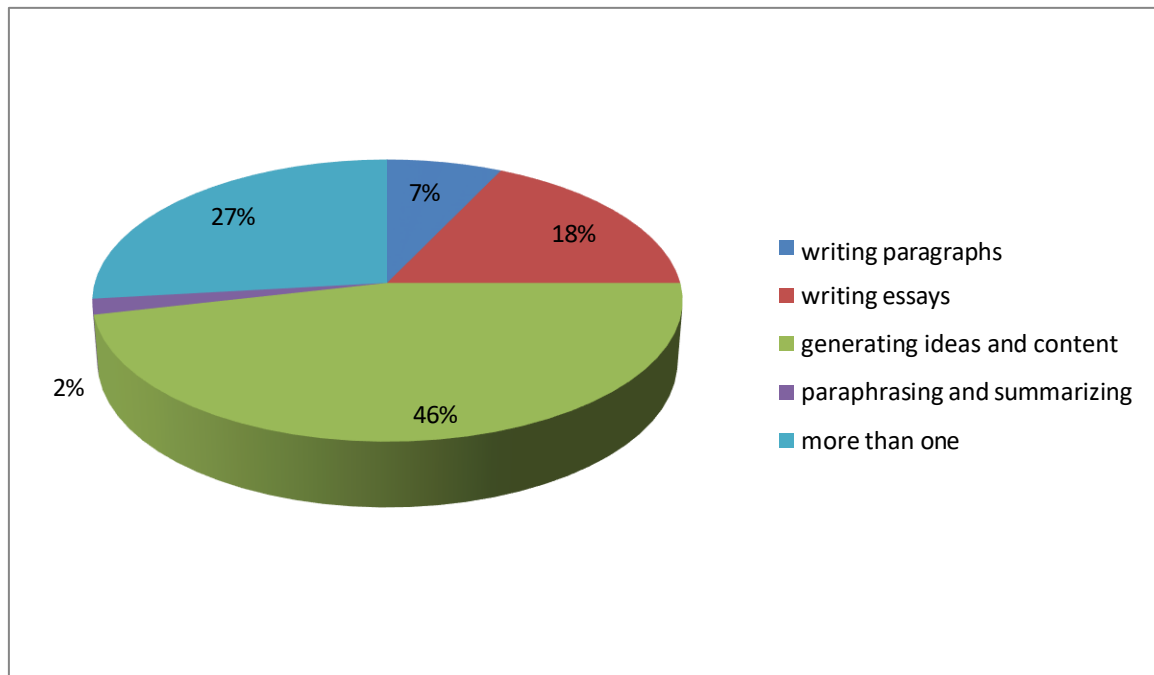
Graph 8 demonstrates that around 46% of the students when it comes into the use of ChatGPT in writing assignments they prefer to make use of it especially in generating ideas and content because ChatGPT can generate initial text or outlines, helping students get past the initial hurdle of a blank page. 27% of them prefer to use it in more than one assignments. Students might be using ChatGPT for a combination of the above tasks or even others not explicitly listed. They might be using it for brainstorming, then incorporating the generated content into essays or paragraphs. 18% would rather use it in writing essays, more importantly, in getting a starting point as well as paraphrasing and summarizing. The other 7% Similar to essays, using ChatGPT for paragraphs raises concerns about plagiarism if students do not properly attribute generated content. Moreover, the remaining respondents make use of it in paraphrasing and summarizing due to its importance in generating phrases and clauses.

Q9/ Do you use Quilbot in ?

Graph: 09

The use of Quillbot
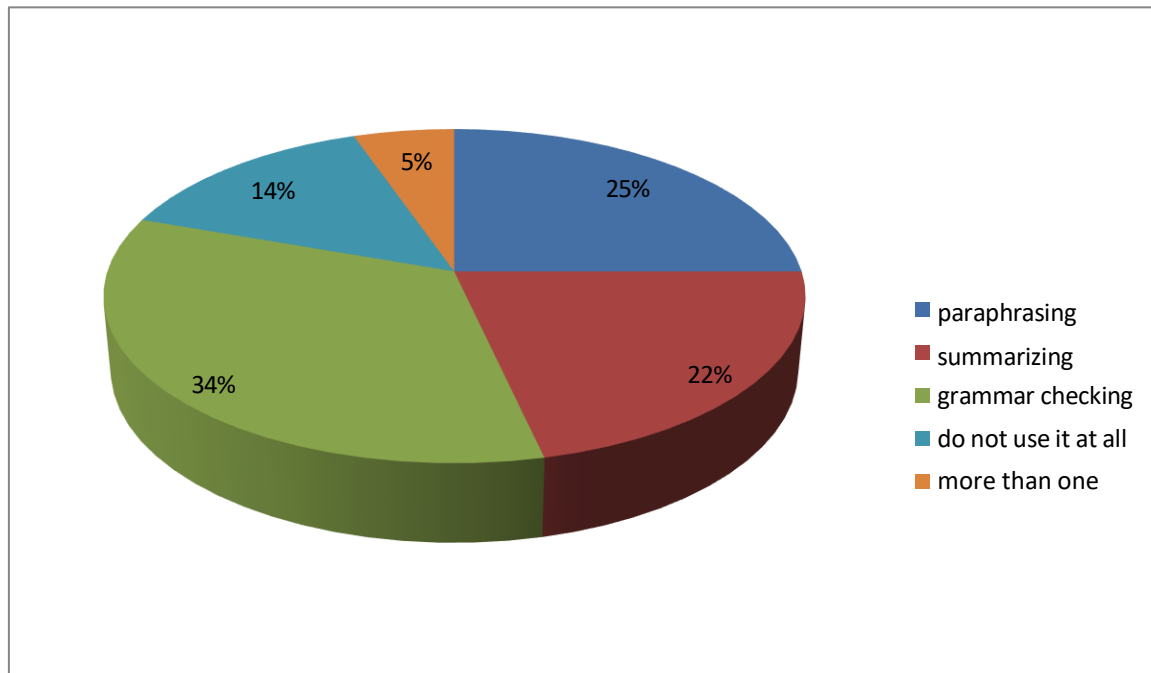
Graph 09 shows that the majority of students are committed into using Quillbot particularly in grammar checking, because Quilbot can help catch errors in punctuation, subject-verb agreement, and sentence structure, which can be especially helpful for students who are still developing their writing skills. 22% respond that summarizing can be useful for students who need to condense large amounts of information into a shorter, more manageable format. In addition, 25% use it in terms of paraphrasing, as it is a valuable tool for avoiding plagiarism. By rephrasing sentences and using synonyms. Quilbot can help students express ideas in their own words while still citing the original source. 14% of students prefer to not use it all to avoid plagiarism and to not rely on it. The rest of students 4% use it in more than one assignment.

Q10/ Do you use grammarly in?

Graph: 10

The use of Grammarly
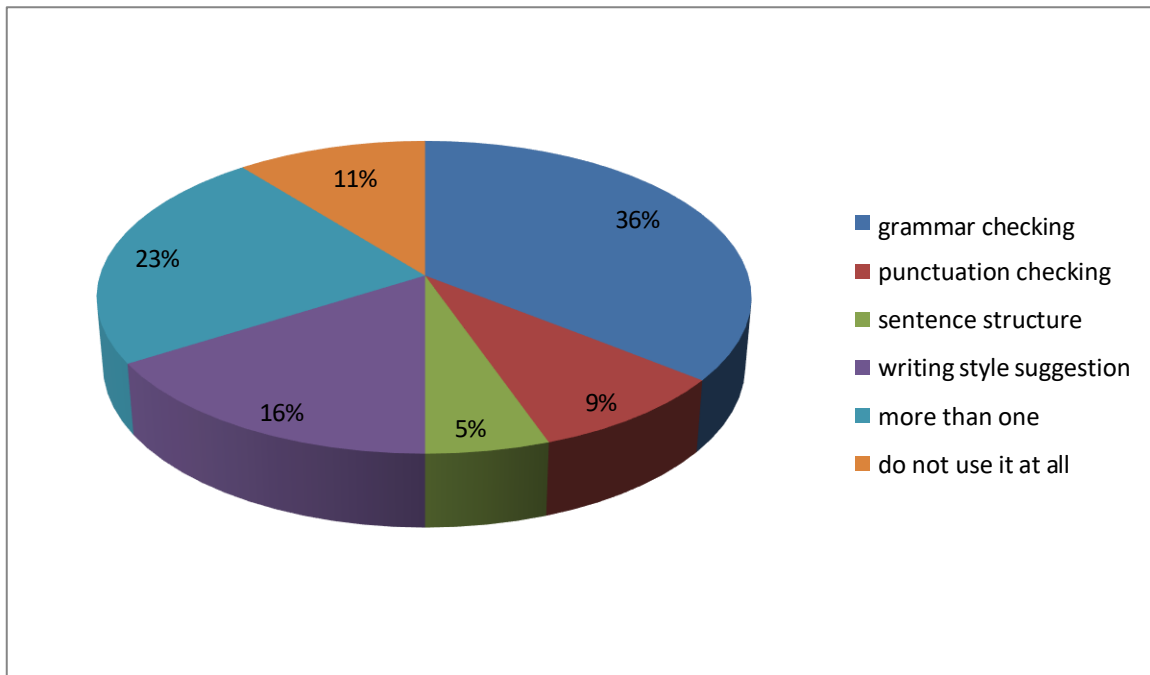
Graph 10 illustrates that a big portion of students around 36% of them tend to make use of grammarly especially when it comes into grammar checking because It checks for common grammatical errors like subject-verb agreement, tense inconsistencies, and types. 23% of those respondents use it in more than one task as it helps maintain consistent writing style and catches errors throughout different assignments. 16% use it in writing style suggestion since this feature goes beyond basic mechanics, suggesting improvements in tone, clarity, and word choice. 11% would rather to not use at all in order to avoid over-dependence. 9% of them use it only to check whether there is any punctuation missing or misplaced. The remaining 5% of respondents use it to build sentences in a structured way.

Q11/ what do you think is improved after using the AI writing assistance tools?

In this question, students are asked to state the improvements that they notice in their writing after using the AI writing assisted tools. Some of them answered that their writing skills are improved after using the AI writing assisted tools to complete the writing assignments either inside the classroom or outside it. Students may generate new ideas, do paraphrasing and summarizing activities by imitating the AI writing prompts. Grammar and spelling AI checkers also help them having a great command of grammar rules and avoiding

Committing spelling mistakes by taking into consideration the feedback given by these tools. In addition, sentence structure, vocabulary enrichment and writing styles suggestion are among the writing skills, which are enhanced. Students start to construct complex sentences with different language styles. However, other students comment that they do not see any improvements in their writing skills after using the AI writing assisted tools. While there are some students said that they do not use these AI writing tools at all as there is no need to use them for improving the writing skills.

Q12/ would you support the integration of AI writing applications in teaching and learning writing skills?

In this question, we ask students to say if they support the integration of AI writing application in teaching and learning writing. Most of students respond, yes. The reasons behind their answer are stated below:

- AI application are accessible nowadays and free.

- AI applications increase students motivation to write by providing feedbacks

- Avoiding to receive negative feedback from teachers which my decrease students motivation

- Help students to accomplish the writing assignments quickly.

- Teacher may give AI writing prompts for students as writing model.

Nevertheless, other students do not support the integration of AI application in teaching and learning writing. Because they think these tools will determine their cognitive abilities from developments. AI applications also may kill students' motivation of writing and critical thinking and become over-reliant on these tools.

2 - 4 - Discussion of the Main Findings of the Students' Questionnaire

The findings from the students' questionnaire reveal a nuanced impact of AI-powered writing tools on the writing skills of Master 1 students at Mila University Centre. This conclusion synthesizes the key insights from the study, emphasizing the dual nature of AI's influence on writing education and proposing recommendations for balanced integration.

AI tools such as ChatGPT, Grammarly, and Quillbot have demonstrated significant benefits in enhancing writing efficiency and accuracy. A substantial portion of students reported using these tools regularly to streamline their writing process. The tools help in generating ideas, organizing content, checking grammar, and refining writing style. This not only saves time but also allows students to focus on higher-order writing skills, such as developing arguments and analyzing content. The immediate feedback provided by these tools helps students identify and correct errors in real time, thereby improving their technical writing skills.

The study highlights that AI tools are particularly effective in helping students overcome common writing challenges. For instance, the majority of students cited vocabulary limitations and grammar issues as significant hurdles. AI applications like Quillbot and Grammarly assist in expanding vocabulary and correcting grammatical errors, making writing tasks less daunting. Moreover, these tools offer solutions for sentence structure and punctuation issues, contributing to clearer and more coherent writing.

AI tools also play a crucial role in increasing students' motivation and confidence in writing. Positive feedback from AI tools can boost students' morale, encouraging them to engage more actively in writing assignments. The tools provide a non-judgmental platform for students to experiment with their writing, reducing the fear of negative feedback from teachers. This supportive environment fosters a positive attitude towards writing and enhances students' willingness to practice and improve their skills.

One of the primary concerns raised by the study is the risk of students becoming overly reliant on AI tools. While these tools offer substantial assistance, there is a danger that students might depend too much on them, leading to a decline in their ability to write independently. Over-reliance on AI can hinder the development of critical thinking and problem-solving skills, which are essential components of effective writing. Students might become accustomed to AI-generated content and corrections, neglecting the need to develop their own writing proficiency.

The use of AI tools raises important ethical and academic integrity issues. Students might misuse these tools for tasks like paraphrasing and summarizing without proper attribution, leading to concerns about plagiarism. Additionally, the automatic generation of content by AI can sometimes result in biased or inaccurate information, which students might unknowingly incorporate into their work. Educators need to address these ethical implications and guide students on the responsible use of AI tools.

3 - Section Two: Teachers' Questionnaire

3 - 1 - Administration of the teachers' Questionnaire

Teachers' questionnaire was delivered to five teachers of English language at the department of foreign languages at Abdelhafid Boussouf University Center of Mila. The aim behind the random selection of teachers because most of them have experience in teaching different modules and they give various writing assignments to their students.

3 - 2 - Description of the Teachers' Questionnaire

The questionnaire consists of 10different questions divided into two sections. The first section consists of five questions (Q1-Q5). It attempts to gather general information about teachers' experience in teaching English language at university. As well as how they assess their learners' level of writing, besides how students react when they are assigned to do

Writing activities either inside or outside the classroom. In addition to the biggest difficulties that are encountered by students when they accomplish their writing tasks the second section is entitled "teacher's perception about students use of AI assisted writing tools", which contains five questions (Q6–Q10). It deals with teachers' perceptions of whether their students use AI writing assisted tools like Chatgpt, Quilbo and Grammarly when completing the writing assignments and which one is considered better for students to enhance their writing skills. Moreover, do teachers notice any writing improvement by students who use AI writing assisted tools? Finally, weather teachers support the integration of AI in teaching and learning writing skills

3 - 3 Analysis of the Teachers' Questionnaire

Section One: General Information and writing skills

Q1/ How long have you been teaching Written Expression Module?

Graph: 11

Teachers' Experiences in Teaching English language
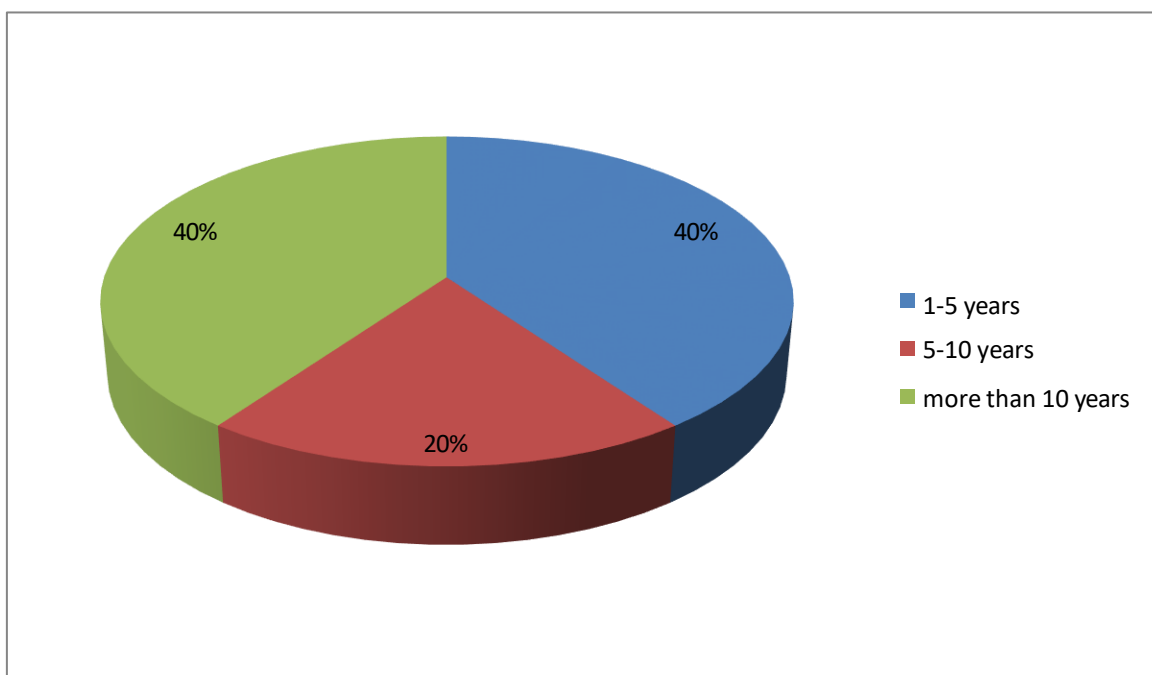
The graph clarifies teachers' experiences in teaching the English language. The results demonstrate (40. %) of the participants have been teaching English language for less than five years, and another two teachers (40%) said that they have been teaching English language for five to ten years. The remaining percentage (20%) represents one teacher who have a long history of teaching English language at the university for more than ten years.

Q2/ how often do you give your students writing assignments?

Graph 12:

The frequency of writing assignments given by teachers
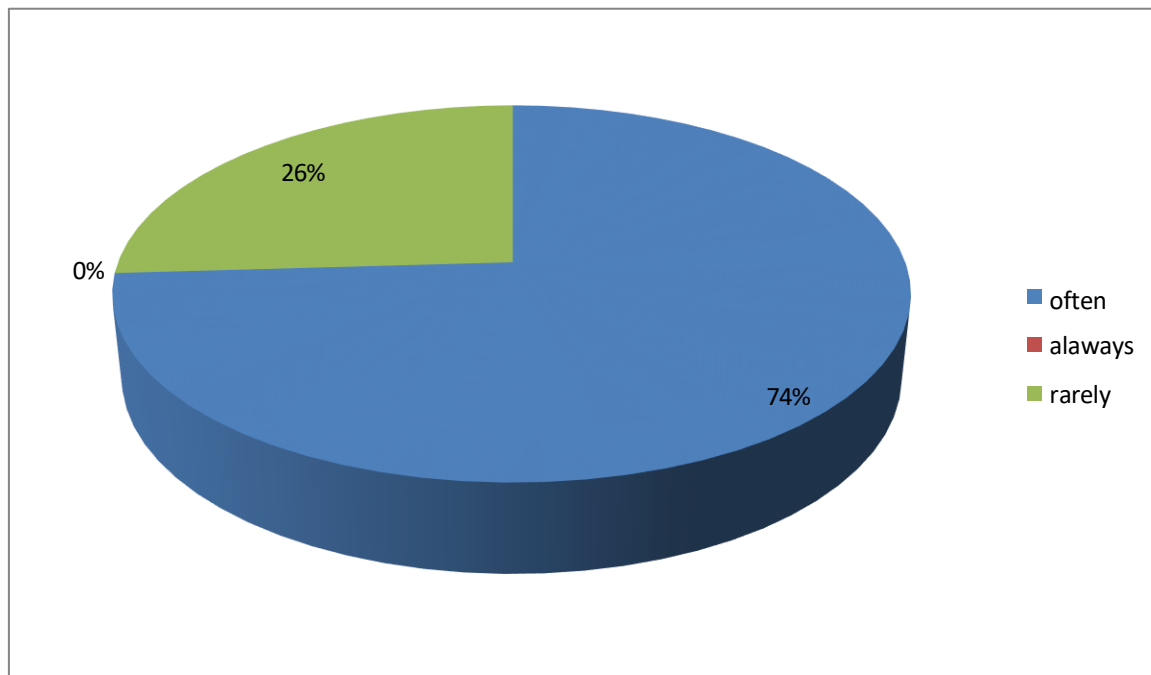
Graph depicts that four teachers who represent 74% declare that they often give their students writing assignments. This shows the big concerns of teachers about enhancing the students writing skills like: the command of grammar rules, vocabulary and sentence structure. Furthermore, writing assignments encourage students to think critically, express their ideas, analyze information and improve the communication skills both written and verbal. The remaining 26% rarely to assign their students to do writing activities due to the

Intensity of lectures the teacher should present in the classroom or the teacher have no interest about giving writing tasks to his students.

Q3/ how do your students react when they are asked to do writing assignments?

Graph: 13

The student's reaction toward doing writing assignments
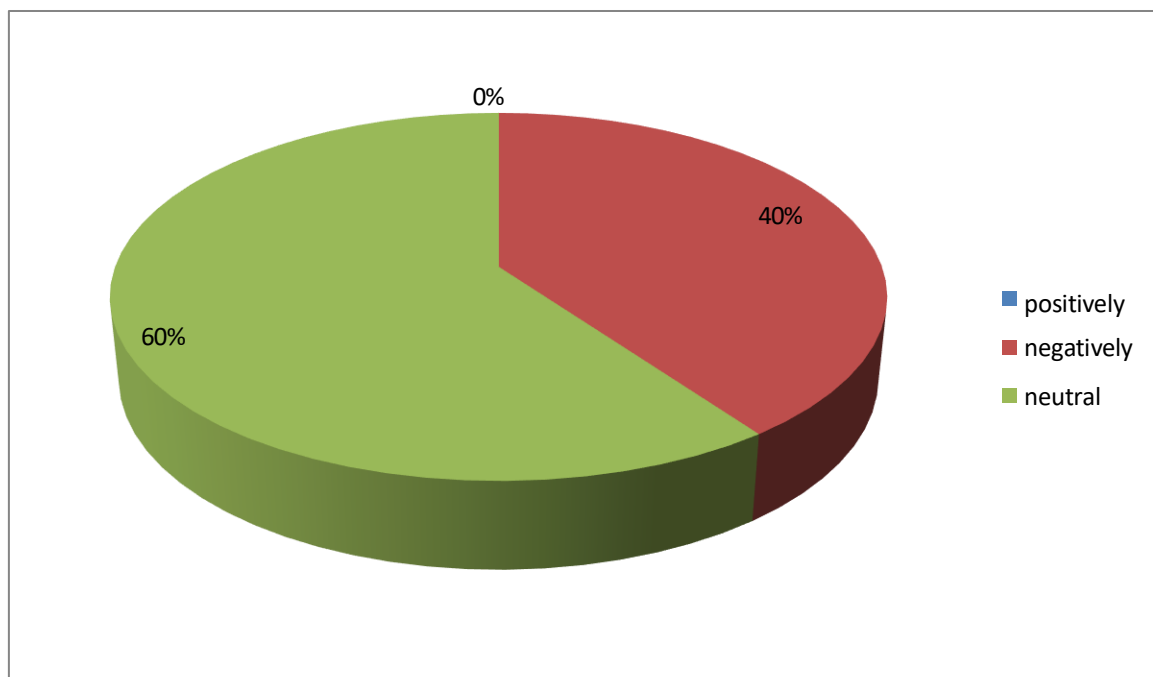
Graph illustrates how students react toward doing writing assignments. 60% of teachers state that their students stay neutral without showing any kind of feelings toward doing writing activities; maybe it is a result of lack of motivation to write or have no interest about the topics of writing tasks. While the remaining 40% acknowledge that, their students have a negative reaction when they are asked to do writing assignments and this has a relation to the negative feedbacks they are received by teachers on their writing.

Q4/ how do you evaluate your students writing skills?

Graph: 14

Teachers' Evaluations for Their Learners' Level in Writing
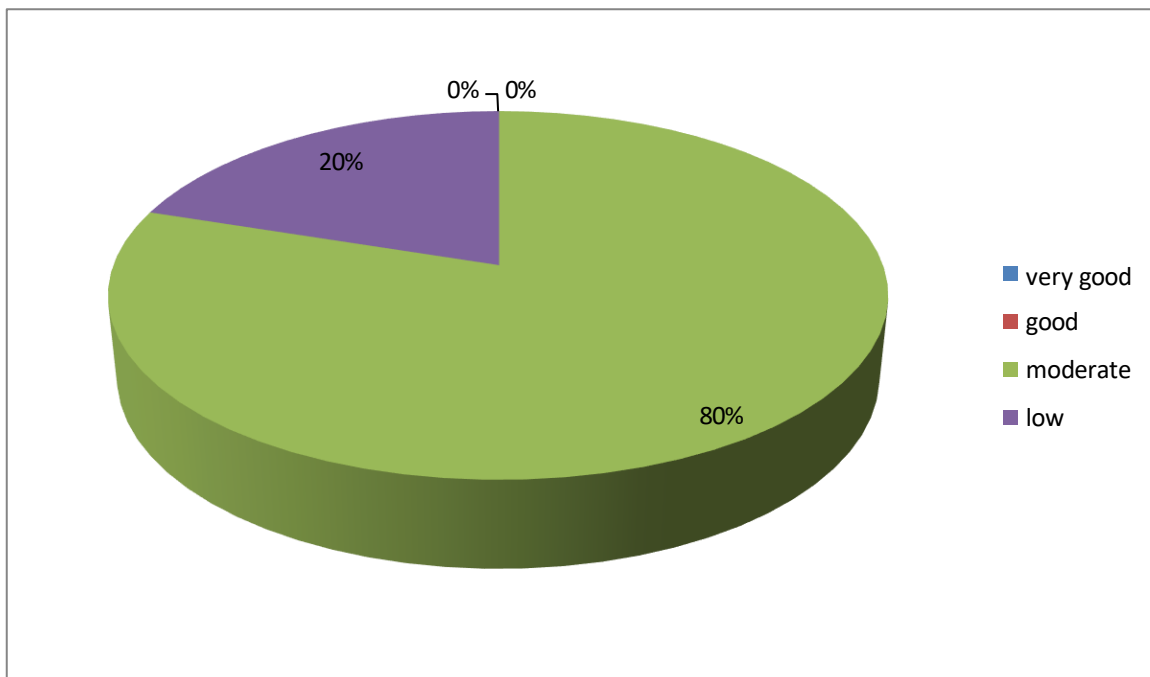
Graph depicts the teachers' perception about their students writing skills level.80% announced that their students have a moderate level of writing as a consequence of student's prior knowledge of some writing skills also they make a great efforts to boost their writing skills. Moreover, receiving an adequate support and guidance from teachers aligned with constructive feedbacks can help students maintain a moderate level of English writing. Whereas, just 20% said that their students have a low level of writing .because they have a limited knowledge about the writing skills and they lack motivation to engage in writing activities given by the teachers .insufficient support by teachers play a crucial role to restrict students from improving their level of writing or offering negative feedback as well leads to the determination of students writing level.

Q5/ What are the biggest difficulties that your students usually face when doing writing assignments.

In this open-ended question, teachers are required to inform us about the biggest difficulties that their students usually face when they do writing assignments. Teachers' observations on students writing skills are so different. Some teachers notice that their students have problem with the use of grammar rules, poor vocabulary and commit lots of

Spelling mistakes. Other teachers said that the biggest difficulties students face when writing are coherence, cohesion and the organization of ideas. While the rest them said that students cannot do summarizing and paraphrasing activities in a proper way, in addition to other writing skills.

Q6) Do you notice that your students use the AI writing tools like Chatgpt, Quilbot and Grammarly when doing the writing assignments?

This question investigates weather the teachers notice that their students use AI writing assisted tools like Chatgpt, Quillbot and Grammaly when accomplishing their writing assignments. All the teachers notice that students use AI assisted tools to do the writing assignments especially home works, because they notice a distinction between the students real writing- level and what is written in the papers like advanced vocabulary, sentence structure, no spelling and grammar mistakes, in addition to the well organization of ideas and wealth of information.

Q7/ Do you notice any improvements in students writing skills when they use AI writing tools like Chatgpt, Quilbot and Grammarly?

All teachers notice that there is an improvement in students writing when they complete their writing assignments. However, some teachers comment that this improvement does not reflect the students' real level of writing in comparison with what they write during the examination and tests periods. Since they copy and paste the information from the AI websites. While the rest of teachers acknowledge that some students know how to benefit from the use of AI writing assisted tools to enhance their writing skills and avoid making grammar and spelling mistakes, enrich their vocabulary, ameliorate writing styles and ideas expansion.

Q8/ In your opinion, what are the writing skills that chatgpt, quilbot and grammarly may help to enhance?

This question reveals how AI writing assisted tools: chatgpt, quillbot and grammarly help students to develop their writing skills. Teachers observe that these AI writing tools may help students to organize their ideas, build a strong sentence structure, the right choice and enrichment of vocabulary. Furthermore, they suggest alternative writing styles for students aligned with the option of rephrasing and summarizing sentences. In addition, AI writing tools assist students to avoid making spelling and grammar mistakes with the command of punctuation marks that are offered by Grammarly application. Cohesion and coherence are among the writing skills that AI writing tools may provide for students as well.

Q9/Have you ever tried to integrate the AI writing tools inside the classroom to help students doing writing assignments?

All teachers respond that they have never tried to integrate AI writing tools inside the classroom to help students doing writing assignments. Because they think this overreliance may restrict their self-dependence. However, some of them suggest that the concentration on reading may be the best way to develop writing skills. Teachers should provide more reading materials to their students to build the reading habit inside them. Increasing motivation can be the key for teachers to aid their students enhancing the writing skills, by creating a vital environment inside the classroom and push students to interact positively with the writing activities.

Q10/According to you, which of the AI writing tools is better for the students to improve their writing skills?

Graph: 15

The best AI writing assisted tool for improving writing skills
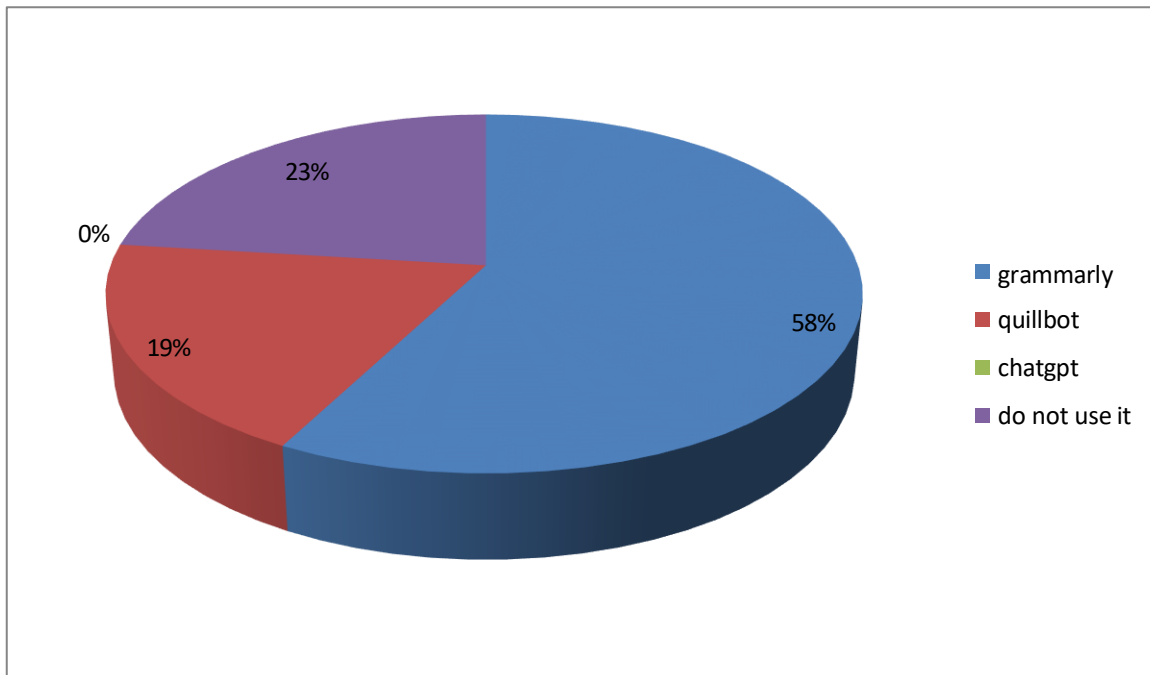
 56% of teachers say that grammarly is the best AI tool to help students boosting their writing skills. Because it offers many writing options like grammar checking, correcting spelling mistakes in addition to giving writing styles suggestion for writers.19% prefer quillbot, as it can do the paraphrasing and summarizing activities. Students may take its writing style as a model to develop their writing skills. The remaining 1% do not use any of the AI writing tools since they consider them as the main reason to hinder students from developing their critical thinking and writing creativity.

3 - 4 - Discussion of the Main Findings of the Teachers' Questionnaire

 The teachers' questionnaire results offer a comprehensive view of both the current teaching practices and the emerging role of AI-assisted writing tools in the educational process at Abdelhafid Boussouf University Center of Mila. This expanded conclusion will delve deeper into the implications of these findings, their potential impacts on teaching and learning, and the future directions for integrating AI technology into the curriculum.

 The diversity in teaching experience among the participants highlights a broad spectrum of pedagogical approaches and insights. With 40% of teachers having less than five years of

Experience and another 40% with five to ten years, there is a blend of fresh and seasoned perspectives on student engagement and the challenges in teaching writing skills. The remaining 20%, with over ten years of experience, add a depth of understanding regarding long-term trends and effective strategies in writing instruction.

The frequent assignment of writing tasks by 74% of the teachers underscores a strong commitment to improving students' writing abilities. This practice is essential for developing critical thinking, vocabulary, grammar, and overall communication skills. However, the 26% of teachers who rarely assign writing tasks highlight an area for potential improvement, as regular practice is crucial for student development.

The varied reactions of students to writing assignments, with 60% remaining neutral and 40% showing negative responses, indicate a significant challenge in motivating students. This lack of enthusiasm might stem from negative feedback, uninteresting topics, or a general disinterest in writing. Addressing these motivational issues is vital for enhancing student engagement and performance.

The evaluation of students' writing skills, with 80% rated as moderate and 20% as low, reflects a need for continuous support and constructive feedback. The moderate rating suggests that many students are still require consistent encouragement and resources to advance further. The challenges identified by teachers, such as grammar, vocabulary, coherence, and idea organization, point to specific areas where targeted interventions can make a significant difference.

Recommendations:

Combining AI Assistance with Traditional Teaching approaches: To harness the benefits of AI tools while mitigating their drawbacks, a balanced approach is essential. Educators

Should integrate AI tools as supplementary aids rather than replacements for traditional writing instruction. This involves teaching students how to use AI tools effectively and ethically, ensuring that they complement rather than dominate the learning process. AI can be used for initial drafts and technical corrections, while the focus of classroom instruction should remain on developing critical thinking, creativity, and independent writing skills.

Promoting Ethical Use of AI Tools: Educational institutions need to emphasize the ethical use of AI tools. Clear guidelines should be provided on how to use these tools responsibly, with an emphasis on avoiding plagiarism and ensuring proper attribution. Educators should also encourage students to critically evaluate the content generated by AI tools, fostering a habit of questioning and refining AI outputs to ensure accuracy and originality.

Encouraging Independent Writing Practice: To counteract the potential for over-reliance, students should be encouraged to practice writing independently. Assignments that require manual drafting and revision without AI assistance can help reinforce traditional writing skills. Additionally, incorporating peer review sessions and collaborative writing projects can provide valuable feedback and stimulate critical engagement with writing tasks.

Conclusion:

To bring it all together, this chapter is devoted to the practical part of the present research, which aims at investigating teachers' perceptions of the impact of using AI writing assistance tools, specifically ChatGPT, Quillbot, and Grammarly, on students' writing skills. The analysis of the student and teacher questionnaires reveals that students use AI writing tools to enhance their writing skills. Most English language students at Mila University Center reported having a moderate level of English writing proficiency, prompting them to seek better ways to develop their writing skills. This drives them to use AI writing tools as a

Solution, as these tools provide quick feedback on grammar, spelling, and punctuation errors. Additionally, they offer suggestions for writing styles, and perform paraphrasing and summarizing activities. Generating content and ideas is also a powerful feature provided by AI tools.

Regarding the teachers' questionnaire analysis, the results demonstrate that teachers clearly notice an improvement in their students' writing when completing assignments. They observed that while students' writing appears to improve, it does not reflect their true writing abilities when compared to their performance on test papers. Furthermore, teachers have never attempted to integrate AI tools into their writing instruction, which may prevent them from fully benefiting from the advantages of AI writing tools.

The best method for helping students enhance their writing skills is applying a mixed approach that integrates AI writing tools into writing instruction. This balanced approach would allow students to benefit from the strengths of AI tools while still developing their own writing proficiency and critical thinking skills.

General Conclusion

In this dissertation, we explored the impact of AI writing tools, specifically ChatGPT, Quillbot, and Grammarly, on the writing skills of Master 1 students at Mila University. Our research aimed to understand both the benefits and potential drawbacks of integrating these technologies into writing skills.

The findings from the student and teacher questionnaires provided a nuanced perspective. On the positive side, AI writing tools have shown that it significantly enhance writing efficiency and accuracy. Many students reported that these tools helped them generate ideas, organize content, and improve their grammar and writing style, thus enabling them to focus more on higher-order writing tasks such as argument development and content analysis. The immediate feedback provided by these tools was particularly beneficial in helping students identify and correct errors in real-time, leading to improvements in their technical writing skills.

Additionally, AI tools have been effective in addressing common writing challenges such as vocabulary limitations and grammar issues. Tools like Quillbot and Grammarly assist in expanding vocabulary and correcting grammatical errors, making writing tasks less intimidating. These tools also contribute to clearer and more coherent writing by offering solutions for sentence structure and punctuation issues. Furthermore, the positive feedback from AI tools increase students' motivation and confidence, encouraging them to engage more actively in writing assignments without the fear of negative feedback from teachers.

In conclusion, while AI writing tools offer substantial benefits in enhancing writing skills and efficiency, their integration into academic writing should be approached with caution. A balanced approach that combines the strengths of AI with the essential skills of human writing recommended. This includes guiding students on the effective use of AI tools while emphasizing the importance of independent thinking and creativity. By adopting a mixed approach, educators can leverage the advantages of AI tools while fostering the development of students' intrinsic writing abilities, critical thinking, and creativity.

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Résume

L'intégration des outils d'intelligence artificielle (IA) dans les milieux universitaires a transformé la façon dont les étudiants abordent les tâches d'écriture. Cette thèse examine les perceptions des enseignants et des étudiants sur les effets des applications basées sur l'IA ChatGPT, Grammarly et Quillbot. Les applications d'IA ont démontré des avantages substantiels, notamment une efficacité d'écriture améliorée, une précision accrue et une meilleure organisation des idées. Ces outils aident les étudiants à différentes étapes de la rédaction, telles que la génération d'idées, la paraphrase, la synthèse, la vérification orthographique et grammaticale. Les capacités avancées de traitement linguistique des outils d'IA tels que ChatGPT permettent aux étudiants d'affiner leur style d'écriture, leur grammaire et leur cohérence, contribuant ainsi à un travail académique de meilleure qualité. Il existe un risque que les étudiants deviennent trop dépendants de ces outils, ce qui entraînerait une réduction de la pensée critique et des compétences rédactionnelles intrinsèques.

Mots clés : Écriture académique, éthique de l'IA, outils d'IA, pensée critique, motivation des étudiants, compétences rédactionnelles.

ملخص

لقد أدى دمج أدوات الذكاء الاصطناعي (AI) في الأوساط الأكاديمية إلى تغيير الطريقة التي يتعامل بها الطلاب مع مهام الكتابة. تبحث هذه الأطروحة تصورات المعلمين والطلاب حول تأثيرات التطبيقات القائمة على الذكاء الاصطناعي ChatGPT وGrammarly وQuillbot. لقد أظهرت تطبيقات الذكاء الاصطناعي فوائد كبيرة، بما في ذلك تحسين كفاءة الكتابة وزيادة الدقة وتنظيم الأفكار بشكل أفضل. تساعد هذه الأدوات الطلاب في مراحل مختلفة من الكتابة، مثل توليد الأفكار وإعادة الصياغة والتلخيص والتدقيق الإملائي والنحوي. تتيح إمكانات معالجة اللغة المتقدمة لأدوات الذكاء الاصطناعي مثل ChatGPT للطلاب تحسين أسلوب كتابتهم وقواعدهم اللغوية وتماسكهم، مما يساهم في عمل أكاديمي عالي الجودة. هناك خطر من أن يصبح الطلاب معتمدين بشكل مفرط على هذه الأدوات، مما يؤدي إلى انخفاض في التفكير النقدي ومهارات الكتابة الجوهرية.

الكلمات المفتاحية: الكتابة الأكاديمية، أخلاقيات الذكاء الاصطناعي، أدوات الذكاء الاصطناعي، التفكير النقدي، دافعية الطلاب، مهارات الكتابة.

Appendices

Students questionnaire

Dear students,

We would be so grateful if you could respond to the following questionnaire about the impact of using artificial intelligent writing website : Chatgpt, Quilbot and Grammarly on the students writing skill. Your answers are highly deemed for the validity of our research, we hope that you will be so helpful and take a few minutes from your time with all your full attention and interest to answer this questionnaire.

Finally, thank you in advance for your contribution and cooperation.

Section one: *general information*

01) ***How do you evaluate your level of English writing?***

excellent ☐

good ☐

moderate ☐

low ☐

02) ***How much are you interested in doing writing assignments inside the classroom?***

Very interested ☐

interested ☐

not interested ☐

03) ***Are you satisfied with the amount of hours that are specified for doing writing assignments inside the classroom.***

Very satisfied ☐

Satisfied ☐

Not satisfied ☐

Section two: writing skills

04) How often do you do writing assignments ?

Daily ☐

Weekly ☐

Monthly ☐

05) What are the writing assignments you usually do inside and outside the classroom?

Writing paragraphs ☐

Writing essays ☐

Summarizing ☐

Paraphrasing ☐

06) What are the difficulties that you usually face when doing writing assignments?

Lack of vocabulary ☐

Punctuation ☐

Spelling ☐

Language structure ☐

Grammar ☐

Section three: artificial intelligent and writing skills

07) How often do you use Chatgpt, Quilbot and Grammarly in doing writing assignments?

Always ☐

Often ☐

Rarely ☐

08) in which writing assignments do you use Chatgpt?

Writing paragraphs ☐

☐

Writing essays

Generating ideas and content

Paraphrasing and summarizing

09) Do you use Quilbot in ?

Paraphrasing

Summarizing

Grammar checking

10) do you use grammarly in ?

Grammar checking

Punctuation checking

Sentence structure

Writing style suggestion

11) What do you think is improved after using the AI writing assistance websites?

Justify:...
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....
....

12) Would you support the integration of AI writing applications in teaching and learning writing skills?

Justify:...
....
....

Teacher questionnaire

Dear teachers,

This questionnaire is a part of our dissertation. It aims to explore the teacher's perception about the impact of using AI writing tools: Chatgpt, Quilbot and Grammarly on students writing skills.

You are kindly requested to answer the following questionnaire.

Section one: general information and writing skills

01)   How long have you been teaching English

....

02)   How often do you give writing assignments to your students?

Often ☐

Always ☐

Rarely ☐

03)   How do your students react when they are asked to do writing assignments?

positively ☐

negatively ☐

neutral ☐

04)   How do you evaluate your students writing skills?

Very good ☐

Good ☐

Moderate ☐

Low ☐

05)   What are the biggest difficulties that your students usually face when doing writing assignments ?

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Section two: the teacher's perception about students use of AI writing assisted tools

06) Do you notice that your students use the AI writing tools like Chatgpt,Quilbot and Grammarly when doing the writing assignments?

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....

07) Do you notice any improvements in students writing skills when they use AI writing tools like Chatgpt, Quilbot and Grammarly?

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08) In your opinion, what are the writing skills that chatgpt, quilbot and grammarly may help to enhance the students writing skills?

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09) Have you ever tried to integrate the AI writing tools inside the classroom to help students doing writing assignments.?

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....

10) According to you, which of the AI writing tools is better for the students to improve their writing skills?

Grammarly   ☐
Quilbot   ☐
Chatgpt   ☐
Justify

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